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# BULLETIN

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NO. I.

### *Contamination of River Water-courses--An Epidemic of Typhoid Fever.*

The excessive prevalence of fever at Lowell, and other points on the Merrimac River, has led the municipal authorities of that city to institute an investigation into the water supply and other suspected fever causes, which has brought out some most interesting and significant revelations. The report on this subject, as made by Prof. W. T. Sedgwick, Biologist to the State Board of Health of Massachusetts, appears to be an exceptionally clear and forcible document. It was published in two of the April numbers of the *Boston Medical and Surgical Journal*. After considering the relations of the excessive typhoid rate and mortality with the milk supply, and excluding that as a probable source of danger, the author fixes his attention upon the drinking water of the city, which has for many years been chiefly drawn from the Merrimac River. The writer shows by tables that the two cities of Lowell and Lawrence, both getting water from the same river, have been grave sufferers from fever, far

beyond most of the other cities of the same State. In Lowell, there were, in 1889, 85.8 deaths by typhoid fever in each 100,000 of the population, while in 1890 the rate exceeded 158 under the same census. In Lawrence the rate was higher in 1889, 124.2 per 100,000, than in Lowell; but in 1890, it rose to a less extent than in the adjoining city, namely, to 125.4 per 100,000. The tables also show that the cities of Manchester and Haverhill, although having many climatic and general conditions in common with Lowell and Lawrence, and although suffering to some extent from fever, have not, in either 1889 or 1890, approached, even when at their worst state, within 38.7 per 100,000 of the lowest datum above given in regard to the city of Lowell. These facts have led to the conclusion that the cause of the recent epidemic could not be discovered in any general or climatic conditions. So, too, the fact that the two cities suffering the most severely, but only in respect of typhoid fever, excluded the idea of purely local influences. But a more positive proof of the suspected infected water supply was sought for and, it is believed, obtained beyond peradven-

ture, in the discovery of distinct typhoidal pollution of Stony Brook, an important affluent of the Merrimac. Prof. Sedgwick was enabled to locate the occurrence of fever cases in August, September and October, 1890, the excreta from which, a part of the time at least, were discharged into the stream by means of a privy so built as to overhang the water. A heliotype illustration accompanies the report, showing the grossly unsanitary privy arrangements belonging to a foundry at which one or more of the typhoid cases worked during the time when diarrhea was an urgent symptom. The illustration shows a frame structure, built on a staging expressly designed to secure the dropping of all excreta from the foundry workmen directly into the running water which, a few miles below, is known to be the drinking supply of thousands of fellow-citizens. A grosser or more culpable sin against the health of a populous community could scarcely be portrayed by any other wood cut of the same dimensions—about one-third of a page in size. It is almost as outspoken a charge against the fidelity of the local health officials as if they had been visited with an indictment of the Grand Jury, and reminds us of some of the outline drawings of Pridgen Teale's primer on Dangers to Health, published about twenty years ago.

No sanitarian who is engaged in teaching or in lecturing upon the prevention of infectious diseases, can afford to be without a copy of this instructive picture. The point of difficulty in the proof of propositions of the reporter is seen in the finding of the polluting cases just a little anterior in time to the outburst of the fever; and this the investigation has been apparently enabled satisfactorily to clear up by fixing the appearance of four cases of fever along the banks of Stony Brook during a period of two months before the aggravation of the epidemic within the cities that took their water supplies, in part, from that polluted stream. Of the precise conditions of the drinking water of Lowell during the epidemic, the author of the report cannot speak; but it is a most significant fact, as he points out, that within one month after the time of infection of one of the

foundry cases, an epidemic of typhoid fever in Lowell rose very rapidly, culminated, and began to decline. Within that same month there was also the greatest mortality of any month during the year, namely, thirty deaths from typhoid fever. There was a typhoid mortality in Lowell during each one of the earlier months of the year, some of which mortality may be traceable to the earlier Stony Brook cases; the later phases of an epidemic description may have their explanation in an infection of the reservoir and supply pipes of the city itself, also by secondary infection from person to person, which is always a feature of typhoid epidemics.

The sluggish decline after New Year's day, 1891, registered upon the diagrams of monthly mortality, is explicable by the recurrent crops of secondary infections which are inevitable to such epidemics; and the periodic fluctuations in the weekly mortality curve were probably due to the same kind of reinforcements. In support of this view, the author calls attention to the fact that the elevations occur at intervals, equal to the incubation period of typhoid fever, namely, every two weeks—a fresh crop of cases springing up every fortnight.

The report concludes by saying that in the absence of any other sufficient source of contamination of the drinking water used by the people, the responsibility for the epidemic must naturally be ascribed to the undoubted infection of Stony Brook, three miles above Lowell; and it may be remarked that the villages bordering on that brook have never in forty years, had so many cases of fever, liable to infect the stream, as in the past two years. The fever epidemics of both Lowell and Lawrence can thus be completely and satisfactorily accounted for, as well as the constant excess of their typhoid rate, from which both of these cities have long suffered. There is, says the report, good reason to believe that the germs of the fever have been carried alive and virulent that three miles from Stony Brook to Lowell, and nine miles further from Lowell to Lawrence; and perhaps under favorable conditions, these germs may have been transported from Manchester, N. H., or even more distant points, arriving at Lowell,

live and virulent, so that until a new source of supply shall have been obtained, the water taken from the Merrimac River must be regarded as a menace to health, both constant and serious. Numerous bacteriological examinations were made of the Merrimac River water during the latter end of the epidemic; but at no time was the investigator able to isolate the bacillus of typhoid fever. It would doubtless have been different had the examinations been undertaken at an earlier stage of the stream's infection.—*Journal American Medical Association.*

#### *Summary of Mortuary Reports for March, 1892.*

(SEVENTEEN TOWNS.)

	White.	Col'd.	Total.
Aggregate population.	49,100	40,600	\$9,700
Aggregate deaths ....	61	69	130
Representing an annual death-rate per 1,000.	14.9	20.4	17.4
Deaths under 5 years old.			47
<i>Causes of death.</i>			
Malarial fever.....	0	1	1
Typhoid fever.....	2	0	2
Measles .....	2	0	2
Pneumonia .....	12	7	19
Consumption .....	7	11	18
Brain diseases .....	4	0	4
Heart diseases.....	7	2	9
Neurotic diseases....	1	3	4
Diarrheal diseases...	1	3	4
All other diseases ...	21	33	54
Accident .....	1	0	1
Still-born.....	3	9	12
	61	69	130

#### *Review of Diseases for March, 1892.*

*Brain-fever*—Was reported from Caswell.  
*Bronchitis*—From Edgecombe, Haywood, Johnston, Lincoln, Lenoir, Orange, Rowan, Sampson and Wayne—9 counties.

*Chicken-pox*—From Caswell.

*Cholera (hog)*—From Pender, Pitt, Randolph and Sampson.

*Consumption*—From Onslow.

*Diphtheria*—From Nash, New Hanover, Stokes and Wake.

*Distemper*—From Randolph.

*Dysentery*—From Onslow.

*Erysipelas* From Pitt.

*Influenza or La Grippe*—From Alexander, Carteret, Catawba, Edgecombe, Greene, Jackson, McDowell, Mitchell, Montgomery, New Hanover, Onslow, Pender, Pitt, Rowan, Sampson, Watauga and Yancey—17 counties.

*Malarial Fever*—From Guilford and Onslow.

*Measles*—From Caldwell, Carteret, Caswell, Cleveland, Columbus, Duplin, Edgecombe, Franklin, Granville, Greene, Henderson, Lenoir, Montgomery, Nash, New Hanover, Onslow, Pitt, Randolph, Sampson, Stokes, Union, Wayne and Wilson—23 counties.

*Mumps*—From Alexander.

*Pneumonia*—From Alexander, Cherokee, Cleveland, Durham, Edgecombe, Greene, Guilford, Haywood Lincoln, McDowell, Nash, Pitt, Rowan, Sampson, Stokes, Union, Watauga, and Wayne—18 counties.

*Roseola*—From Haywood.

*Scarlatina*—From Montgomery and Wake.  
*Typhoid Fever*—From Burke, Granville, New Hanover, Pitt and Randolph—5 counties.

*Tonsillitis*—From Orange.

*Whooping-cough*—From Alexander, Burke, Caldwell, Catawba, Franklin, Granville, Iredell, Nash, New Hanover, Sampson, Wayne and Wilson—12 counties.

#### *Summary of Reports from County Superintendents of Health for March, 1892.*

*Alamance*—Dr. G. W. Long, Graham. Nothing regarding prevailing diseases. Plans are now on foot for the erection of new and more modern buildings for the Home. Judge Whitaker delivered a charge to the grand jury of our last Court well calculated to cultivate an enlightened public sentiment in favor of sanitary reform.

*Alexander*—Dr. J. B. Watts, Taylorsville. Mumps, whooping-cough, *la grippe* and pneumonia were the prevailing diseases during the past month. The sanitary condition of the

county has been very good. That of the public buildings is about the same as at the last report, with no efforts at improvement.

*Alleghany*—No Board of Health.

*Anson*—Dr. E. F. Ashe, Wadesboro. No report.

*Ashe*—No Board of Health.

*Beaufort*—Dr. S. T. Nicholson, Washington. No report.

*Bertie*—No Board of Health.

*Bladen*—Dr. N. Robinson, Elizabethtown. No report.

*Brunswick*—No Board of Health.

*Buncombe*—Dr. H. B. Weaver, Asheville. No report.

*Burke*—Dr. J. L. Laxton, Morganton. There have been reported two cases of whooping-cough and one of typhoid fever. The sanitary condition of the county is about the same as usual. There is very little sickness in the county. The case of typhoid was imported from Tennessee. The sanitary condition of the public buildings is as good as it can be made with such buildings.

*Cabarrus*—No Board of Health.

*Caldwell*—Dr. A. A. Kent, Lenoir. Three cases of measles and ten of whooping-cough are all there is to report. The sanitary condition of the county is unusually good; the above named diseases with a few cases of *la grippe* being all. New sewer-pipes have been put into the jail, rendering the sanitary condition better. That of the poor-house is good.

*Camden*—No Board of Health.

*Carteret*—Dr. M. F. Arendell, Morehead City. Measles has prevailed moderately. The sanitary condition of the county is very good. We have had *la grippe* generally in the county, but there have been very few fatal cases.

*Caswell*—Dr. R. H. Williamson, Yanceyville. Chicken-pox, measles, and brain fever, with children, have prevailed. The sanitary condition of the county is good; also that of the public buildings.

*Catawba*—Dr. G. H. West, Newton. *La grippe* has prevailed in this vicinity, and there have been reported a few cases of whooping-cough. The sanitary condition of the public buildings is about the same as last reported.

*Chatham*—Dr. H. T. Chapin, Pittsboro. No report.

*Cherokee*—Dr. J. F. Abernathy, Murphy. With the exception of a few cases of pneumonia the county is free from epidemic or contagious diseases. The public buildings are all in fair sanitary condition. The hospital and jail are under good sanitary discipline.

*Chowan*—No Board of Health.

*Clay*—No Board of Health.

*Cleveland*—Dr. O. P. Gardner, Shelby. Measles, *la grippe* and pneumonia have prevailed in all portions of the county. The sanitary condition of the county is good; also that of the public buildings.

*Columbus*—Dr. I. Jackson, Whiteville. The sanitary condition of the county is good. A few cases of measles have been reported. Outside of catarrhal troubles there has been very little sickness in the county. The sanitary condition of the public buildings is good.

*Craven*—Dr. L. Duffy, New Berne. No report.

*Cumberland*—Dr. J. H. Marsh, Fayetteville. The sanitary condition of the county is good; that of the public buildings is tolerably good. Some improvements are being made at the poor-house.

*Currituck*—No Board of Health.

*Dare*—No Board of Health.

*Davidson*—Dr. R. L. Payne, Jr., Lexington. No report.

*Davie*—No Board of Health.

*Duplin*—Dr. J. W. Blount, Kenansville. The sanitary condition of the county is good. There is an epidemic of measles that is spread over nearly the entire county. The sanitary condition of the public buildings is fairly good.

*Durham*—Dr. N. M. Johnson, Durham. The healthfulness of the county for the month of March has been as good as usual, though we have had some pneumonia, etc., resulting from colds. Sanitary condition of the public buildings is good.

*Edgecombe*—Dr. Donald Williams, Tarboro. Measles has prevailed in all parts of the county. Since October, influenza has prevailed in all parts with its dangerous sequelae—pneumonia and bronchitis. These latter have told very

heavily on the aged and infirm; the death-rate has been in consequence very high. The sanitary condition of the public buildings is very good.

*Forsyth*—Dr. D. N. Dalton, Winston. No report.

*Franklin*—Dr. E. S. Foster, Louisburg. Measles and whooping-cough have been and still are prevailing very extensively in all parts of the county. With these exceptions, the health of the county is very good. The sanitary condition of the public buildings is good.

*Gaston*—Dr. J. H. Jenkins, Dallas. No report.

*Gates*—No Board of Health.

*Graham*—No Board of Health.

*Granville*—Dr. Patrick Booth, Oxford. There have been reported ten cases of measles, four of whooping-cough, and two of typhoid fever. The sanitary condition of the county is good; that of the public buildings is fair. The court-house will soon be completed and greatly improved.

*Greene*—Dr. E. H. Sugg, Snow Hill. *La grippe* has prevailed and several cases of pneumonia and measles have been reported. The sanitary condition of the county is good; also that of the public buildings.

*Guilford*—Dr. E. R. Michaux, Greensboro. The health of the town and county has been remarkably good—very little sickness indeed. Some cases of malaria and occasionally of pneumonia. The sanitary condition of the public buildings is quite good, excepting the jail. There has been talk of building a new jail, but no change has yet been made.

*Halifax*—No Board of Health.

*Harnett*—No Board of Health.

*Haywood*—Dr. J. H. Way, Waynesville. Roseola has been quite prevalent—very mild and no complications; pneumonia of mild type, and bronchitis of moderate severity have prevailed. The sanitary condition of Waynesville is good, and usually so; in the rural districts it is a harder matter and the people are slower to learn the value of sanitary measures. The poor-house is situated in a remote section of the county. It ought to be nearer the county seat, where the inmates could be more

conveniently seen and where they could be shown (as I think they would) more attention from the charitably inclined. We are trying to create a public sentiment in favor of a change. The County Commissioners, as you know, move slowly in these matters.

*Henderson*—Dr. J. L. Egerton, Hendersonville. There have been two cases of measles reported. The sanitary condition of the county has been good.

*Hertford*—No Board of Health.

*Hyde*—No Board of Health.

*Iredell*—Dr. M. W. Hill, Statesville. Whooping-cough has prevailed. The sanitary condition of the county is remarkably good, as far as I have heard; that of the public buildings is good, all things considered. The construction of the jail is very faulty, considered from a sanitary standpoint.

*Jackson*—Dr. J. M. Candler, Dillsboro. *La grippe* has subsided, and the sanitary condition of the county is good; that of the public buildings is also good.

*Johnston*—Dr. L. L. Sasser, Smithfield. Bronchial troubles have prevailed. The sanitary condition of the county is good; that of the public buildings also is good.

*Jones*—No Board of Health.

*Lenoir*—Dr. C. B. Woodley, Kinston. Measles and bronchitis have prevailed in most parts of the county.

*Lincoln*—Dr. W. L. Crouse, Lincolnton. Pneumonia and bronchial troubles have prevailed in all parts of the county. The health of the county is better than for any time in the past six months. The sanitary condition of the public buildings is good.

*Macon*—Dr. J. M. Lyle, Franklin. The sanitary condition of the county is very good; general cleanliness around dwellings is manifesting good results. Diseases arising from the lack of such measures are disappearing, and general good health prevails. The sanitary condition of the poor-house is good.

*Madison*—No Board of Health.

*Martin*—Dr. W. H. Harrell, Williamston. No report.

*McDowell*—Dr. J. H. Gilkey, Marion. *La grippe* and pneumonia have prevailed in

some parts. Other than this there has been but little sickness. The jail is in a fair sanitary condition, and the Home as good as the nature of the buildings will admit of.

*Mecklenburg*—No Board of Health.

*Mitchell*—Dr. C. E. Smith, Bakersville. A considerable number of *la grippe* cases have been reported, but as yet only one death from the much dreaded disease. The sanitary condition of the county is good. The sanitary condition is fair at the jail; there has been some improvement in the alms-house. The first death in the alms-house for eight years occurred last month from paralysis.

*Montgomery*—Dr. F. E. Asbury, Asbury. Influenza has prevailed in all parts of the county. There have been reported eighteen cases of measles and seven of scárlatina. The sanitary condition of the county is better than for some time. The sanitary condition of the public buildings reflects credit on the keepers of poor-house and jail.

*Moore*—Dr. G. McLeod, Carthage. No report.

*Nash*—Dr. J. J. Mann, Nashville. Measles, whooping-cough and pneumonia have prevailed to a great extent. There has been reported a case of diphtheria. The sanitary condition of the county is very good; also that of the public buildings.

*New Hanover*—Dr. F. W. Potter, Wilmington. There have been reported nineteen cases of measles, forty-two of whooping-cough, six of diphtheria, and two of typhoid fever. Influenza has prevailed in many portions of the county. There has been an epidemic of catarhal trouble in horses. The sanitary condition of the county is good. I have been urging the necessity of thorough drainage as well as thorough sanitary policing of the city. Our health officers complain that it is with considerable trouble they can get the scavengers to do their work properly. I have recommended the city to select a responsible person to be placed in charge of the whole matter. The jail is in fair condition, except that the cemented floor is breaking up. This will soon be remedied. The poor-house is in good condition, except dampness in the basement, which is to be remedied soon.

*Northampton*—Dr. H. W. Lewis, Jackson. No report.

*Onslow*—Dr. E. L. Cox, Jacksonville. Seven cases of measles have been reported. There have occurred some cases of acute consumption, dysentery, *la grippe*, and a good many cases of remittent fever. The sanitary condition of the public buildings is fair.

*Orange*—Dr. D. C. Parris, Hillsboro. Bronchitis and tonsillitis have prevailed in all parts of the county. In point of health, the sanitary condition of the county is not so good. Tonsillitis has been severe in character (suppurative); other diseases have been mild. A few cases of rheumatism have occurred. The sanitary condition of the public buildings, except the jail, fairly good; condition of the Home recently improved in the way of repairs on the building.

*Pamlico*—No Board of Health.

*Pasquotank*—No Board of Health.

*Pender*—Dr. S. S. Satchwell, Burgaw. There has been an epidemic of cholera among hogs. The sanitary condition of the county improves in proportion as our people improve in sanitary knowledge. Influenza still continues in all parts of the county. I am using every effort to secure better drainage all over the county as an important factor of health. Especially am I seeking better drainage and improved hygiene for our public buildings. Our authorities are hard to move in this line.

*Perquimans*—No Board of Health.

*Person*—No Board of Health.

*Pitt*—Dr. B. T. Cox, Redallia. Measles and influenza have prevailed in all parts of the county. There have been a few cases of cholera among hogs. There was less sickness during March than in several months. A few cases of typhoid fever in the section of Farmville. An occasional case of pneumonia occurs and one case of erysipelas reported. The sanitary condition of the public buildings is good.

*Polk*—No Board of Health.

*Randolph*—Dr. J. M. Boyette, Ashboro. Three cases of measles and four of typhoid fever have been reported. Hog cholera and distemper in horses have prevailed. The reports of this month show a better sanitary condition of the county. The sanitary condition

of the public buildings is somewhat improved since my last report.

*Richmond*—Dr. J. M. Covington, Rockingham. No report.

*Robeson*—Dr. F. Lewis, Lumberton. There has been scarcely any sickness in the county, and the sanitary condition is good. The courthouse and jail are in good sanitary condition. The county Home is in a dilapidated condition five miles from the county seat. Removal to a nearer point is suggested,

*Rockingham*—No Board of Health.

*Rowan*—Dr. J. J. Summerell, Salisbury. There have been no epidemic diseases reported, either among the people or domestic animals. The general health is good. *La grippe* still lingers in a mitigated form in some neighborhoods. Cases of pneumonia and bronchitis have been reported. The sanitary condition of the public buildings is good.

*Rutherford*—Dr. W. A. Thompson, Cliffdale. The health of the county is much improved since the last report. The sanitary condition of the county is good; also that of the public buildings, considering the faulty construction.

*Sampson*—Dr. J. A. Stevens, Clinton. Influenza, pneumonia, bronchitis, and a few cases of whooping cough and measles have been reported. There has been an epidemic of cholera among hogs. The condition of the jail remains unchanged—its condition is unsanitary. Our poor-house is in excellent sanitary condition and well kept.

*Stanly*—No Board of Health.

*Stokes*—Dr. J. W. Neal, Meadows. The sanitary condition of the county is good. There have been reported three cases of measles, two of diphtheria, and twenty-five of pneumonia. The sanitary condition of the public buildings is good.

*Surry*—No Board of Health.

*Swain*—No Board of Health.

*Transylvania*—No Board of Health.

*Tyrrell*—Dr. Ab. Alexander, Columbia. No report.

*Union*—Dr. W. C. Ramsay, Monroe. Measles, pneumonia, and catarrhal diseases have prevailed in several parts of the county.

We have had but little sickness in this county for the past month—measles in some portions, but not general; pneumonia in one or two sections; catarrhal diseases general, but mild. Sanitary condition of the poor-house good; of the jail bad. The county is preparing to erect a first-class jail.

*Vance*—Dr. A. Cheatham, Henderson. The general health of the county is good, so far as I can learn. The sanitary condition of the public buildings is good.

*Wake*—Dr. James McKee, Raleigh. One case each of scarlatina and diphtheria reported. The sanitary condition of the county is very good; that of the public buildings is good; they are frequently inspected by the city sanitary inspector.

*Warren*—Dr. P. J. Macon, Warrenton. No report.

*Washington*—No Board of Health.

*Watauga*—Dr. W. B. Councill, Boone. Influenza has prevailed in all parts of the county. The sanitary condition of the county is perfectly good in all respects. Both jail and poor-house are in good condition. Influenza has prevailed generally, but of a mild type; very few deaths have occurred—a few old persons have died from pneumonia.

*Wayne*—Dr. John Spicer, Goldsboro. The sanitary condition of the county is good. Measles is still prevailing, but not so extensively as before. Some pneumonia and bronchial troubles, also some whooping-cough reported. Sanitary condition of the public buildings is good.

*Wilkes*—No Board of Health.

*Wilson*—Dr. Albert Anderson, Wilson. Measles has prevailed in all parts of the county, and there have been a few cases of whooping-cough. The sanitary condition of the county is good; also that of the public buildings.

*Yadkin*—Dr. T. R. Harding, Yadkinville. No report.

*Yancey*—Dr. J. L. Ray, Burnsville. *La grippe* has prevailed in many portions of the county. The sanitary condition of the county is tolerably good; that of the public buildings is not very good, and there are no efforts being made to improve them.

*Condition of Jails and Poor-houses by Counties for March, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....	2				39			
Alexander.....					11	500		3
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....								
Burke.....	5	600	0	3	8	800	2	2
Cabarrus.....								
Caldwell.....	7	*	1	5	8	*	3	3
Camden.....								
Carteret.....	0				0			
Caswell.....	5	500		1	22	1,000	9	3
Catawba.....	3		1	2	28		15	10
Chatham.....								
Cherokee.....	8				3			
Chowan.....								
Clay.....								
Cleveland.....	16			4	23	997		5
Columbus.....	7	*		2	16	*		0
Craven.....								
Cumberland.....	6				14			
Currituck.....								
Dare.....								
Davidson.....								
Davie.....								
Duplin.....	1				9			
Durham.....	0				39 (a)			7
Edgecombe.....	16	*	4	5	20	*	3	4
Forsyth.....								

\*Space exceeds one thousand cubic feet. (a) Includes 22 in house of correction.

*Condition of Jails and Poor-houses by Counties for March, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	4				20			
Gaston.....								
Gates.....								
Graham .....								
Granville.....	6	*	2		28 (a)	*	10	
Greene.....	1	500			10	1,000		1
Guilford.....					34	*		
Halifax.....								
Harnett.....								
Haywood.....	6		0	4				
Henderson .....	5				2			
Hertford.....								
Hyde.....								
Iredell.....	7	*			21	462		
Jackson.....	4	200	1	3	4	200	2	2
Johnston .....	5	1,000	4	3	13	*	4	3
Jones.....								
Lenoir.....								
Lincoln.....	9	800		5	25	400		
McDowell.....	3	600	1	0	10	550	1	0
Macon.....								
Madison.....								
Martin.....								
Mecklenburg.....								
Mitchell.....	3				5			
Montgomery.....	3			1	13			10
Moore.....								
Nash.....	9	600	4	5	21	1,000	3	6
New Hanover.....	20	600	10	7	21 (b)	1,000	16	10
Northampton.....								
Onslow .....	4	*		1	1	*	1	
Orange.....	2	*	1	1	22	*	10	6
Perry.....								

\* exceeds one thousand cubic feet. (a) Includes 5 in house of correction. (b) Includes 4 of correction.

*Condition of Jails and Poor-houses by Counties for March, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined,	Space allotted each, (In cubic feet.)	Number giv- ing evidence of success- ful vaccina- tion,	Number who can read and write,	Number inmates in,	Space allotted each, (In cubic feet.)	Number giv- ing evidence of success- ful vaccina- tion,	Number who can read and write,
Pasquotank .....								
Pender.....					4			
Perquimans .....								
Person .....								
Pitt .....					22			
Polk .....								
Randolph.....	6				32			
Richmond.....								
Robeson.....	8	844			9	800		
Rockingham.....								
Rowan.....		*						
Rutherford .....	4	*			26	800		
Sampson.....	1				20			
Stanly.....								
Stokes.....	2	600			15	500	3	2
Surry .....								
Swain.....								
Transylvania .....								
Tyrrell.....								
Union.....	3	*			18	*		2
Vance.....	11	850			14	*		
Wake.....	18	*			107 (a)			
Warren.....								
Washington.....								
Watanya.....	2		0		7		4	
Wayne.....	13	952			4	*		
Wilkes.....								
Wilson .....	3	*	1	3	25	*	7	6
Yadkin.....								
Yancey .....	8	400	3	6	1			

\* Space exceeds one thousand cubic feet. (a) Includes 12 in house of correction.

*Mortuary Report for March, 1892.*

**Meteorological Summary for North Carolina, March, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERMANN, Meteorologist.

## TEMPERATURE (Degrees Fahr.).

## NO. OF DAYS

## STATIONS.

	Monthly Mean.	Highest Date.	Mean Maximum.	Lowest Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.		
Asheville .....	43.2	75	31	53.6	15	19	32.9	60	20.7	66.9	3.07	8	10	13	14	S. & S. E. W.
Bakersville .....	40.1	66	27	51.0	15	19	29.2	51	21.8	.....	1.31	10	....	12	4	.....
Charlotte .....	47.5	71	5	56.4	21	19	38.7	50	17.7	.....	4.05	11	9	11	11	E. ....
Chapel Hill .....	45.1	75	5	56.3	22	10	31.6	53	21.7	.....	2.74	....	....	....	8	.....
Douglas .....	41.6	70	5	56.8	22	11	32.8	48	21.0	.....	2.27	10	9	12	7	S. W. ....
Highlands .....	38.1	67	31	50.2	8	18	26.0	59	24.2	.....	6.90	....	....	....	9	.....
Hendersonville .....	41.1	66	5	50.8	15	19	37.1	47	13.4	76.7	3.65	6	9	16	8	N.W. ....
Kitty Hawk .....	44.5	72	5	51.0	25	11	38.1	47	12.9	.....	2.88	11	9	11	15	N.W. ....
Littleton .....	44.4	74	6	55.6	18	11	33.1	55	22.5	.....	3.23	7	4	18	8	.....
Linville .....	41.9	65	4	51.6	8	18	32.2	57	19.4	.....	2.01	16	4	11	7	.....
Lenoir .....	45.2	67	5	51.9	22	19	37.8	48	14.1	.....	2.99	....	....	....	8	.....
Morganton .....	46.9	75	13	55.3	24	19	40.3	56	15.0	73.6	3.45	....	....	....	6	.....
Mount Airy .....	43.6	70	5	53.1	20	11	34.1	59	19.0	.....	1.86	11	5	15	6	S.W. ....
Oak Ridge .....	41.7	71	5	51.7	20	19	31.8	51	19.9	.....	3.10	8	6	17	13	N.W. ....
Pittsboro .....	43.8	68	5	51.6	22	19	36.1	46	15.5	.....	2.46	8	7	16	6	N. E. ....
Raleigh .....	46.6	74	5	55.7	23	19	37.5	51	18.2	68.7	3.29	10	7	14	13	N. ....
Southport .....	48.8	64	31	55.2	28	19	42.5	36	12.7	.....	3.72	15	5	11	12	N. E. ....
Southern Pines .....	47.4	76	5	61.4	19	19	33.5	57	27.9	.....	3.35	15	6	10	9	S.W. ....
Salisbury .....	48.1	69	31	55.1	26	19	41.1	43	14.0	.....	3.31	....	....	....	7	.....
Weldon .....	45.4	73	5	51.5	23	11	36.3	50	18.2	.....	2.70	10	4	17	14	N. ....
Willeyton .....	44.3	73	5	55.6	22	19	33.0	51	22.6	.....	2.35	8	8	15	8	N. ....
Wilmington .....	59.1	71	5	58.1	27	19	41.8	47	16.6	73.8	2.69	12	7	12	11	N. E. ....

## STATE METEOROLOGICAL SUMMARY FOR MARCH, 1892.

Mean Barometer 30.06 inches; normal for March, 30.05.

Highest Barometer 30.52 inches, on the 21st, at Hattiesburg.

Lowest Barometer 29.33 inches, on the 8th, at Norfolk, Va.

Mean temperature 45.1 degrees; normal for March, 48.0 degrees.

Highest temperature 81, on the 31st, at Chattanooga, Tenn.

Lowest temperature 8, on the 18th, at Highlands and Linville.

Average rain-fall, 3.25 inches; normal for March, 4.90.

Greatest monthly rain-fall, 6.90 inches, at Highlands.

Least monthly rain-fall, 1.31 inches, at Bakersville.

Average number of cloudless days, 10.

Average number of partly cloudy days, 7.

Average number of cloudy days, 14.

Average number of rainy days, 10.

Prevailing wind direction, north-west; average velocity, 9.8 miles per hour. Prevailing direction from many years' observations, south-west. Average velocity, 9.9 miles per hour.

# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

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SUBSCRIPTION FIFTY CENTS A YEAR.

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THOMAS F. WOOD, M. D., *Secretary and Treasurer*, Wilmington.

Entered at the post-office at Wilmington, N. C., as second-class mail matter.

VOL. VII.

MAY, 1892.

NO. 2.

## *The Ventilation of Churches and Chapels.*

That churches should be so ill-ventilated and badly heated as to become sources of danger to the assembled worshippers, is at once hostile to the spiritual as well as to the physical interests of the community. All sanitarians are aware that the air of chapels and churches often becomes distinctly injurious before even an hour of the service has elapsed; many have marvelled that so little care and attention have been bestowed at the outset to construct churches upon even the most common principles of hygiene. The gas—which is almost invariably placed low down over the heads of the people—owing to the large amount consumed, aids materially in the air pollution. No provision is made to supply fresh air, which has been previously warmed, and hence, for the greater part of the year, the inevitable old lady or gentleman who is possessed of a special faculty of detecting an amount of air-movement which an anemometer would barely be sensitive to, insists on all ventilating openings (often only doors and windows) being shut. Further, so as to make matters as bad as they can possibly be, and so as to insure that air shall not be induced to enter by any circum-

ventive tactics, no means of outlet (or at least very inefficient ones) are provided for the escape of foul air. It would have been easy to achieve good results in the first instance, since the matter only entails the application of measures which are well understood and often adopted; but after construction, the best remedial steps involve considerable difficulty and expense. Provision should be made in every case for warming the entering air, preferably by hot-water pipes, since the building itself is best heated by these means; and the warm air may be best admitted by small gratings at the bottom of the walls near the floor, and through perforations in the flooring of the different passages. Gas should be placed high, and not used to heat the building, and the jets might be dispersed in rings, around openings leading directly to the open air, so that the heat generated may be utilized as an agency for extracting air vitiated by the congregation, while at the same time the injurious products of gas combustion are at once removed. Extraction shafts leading into the furnace flue, and having their openings well above the gallery level, might also with advantage be placed in each corner of the building.—*Brit. Med. Jour.—Can. Practitioner.*

*Summary of Mortuary Reports for April, 1892.*

(NINETEEN TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population.	53,100	43,500	96,600
Aggregate deaths ----	53	90	143
Representing an annual death-rate per 1,000,	11.9	24.8	17.7
Deaths under 5 years old.			58
<i>Causes of death.</i>			
Typhoid fever .....	2	0	2
Scarlet fever .....	1	0	1
Malarial fever.....	1	2	3
Whooping-cough .....	2	0	2
Measles .....	0	1	1
Pneumonia .....	6	17	23
Consumption .....	2	15	17
Brain diseases .....	3	4	7
Heart diseases .....	2	4	6
Neurotic diseases .....	2	2	4
Diarrheal diseases....	4	1	5
All other diseases	25	34	59
Accident .....	1	1	2
Still-born .....	2	9	11
	53	90	143

*Review of Diseases for April, 1892.*

*Bronchitis*—Reported from Caswell, Edgecombe, Franklin, Lenoir, McDowell, Sampson and Wilson—7 counties

*Chicken-pox*—From Randolph.

*Diarrhea*—From Alexander and Sampson.

*Diphtheria*—From McDowell, Montgomery and New Hanover.

*Distemper*—From Randolph.

*Dysentery*—From Alamance, Lenoir, Nash, Richmond and Sampson—5 counties.

*Erysipelas*—From Haywood.

*Glanders*—From Wake.

*Hog Cholera*—From Duplin, Johnston, Montgomery, Randolph and Sampson—5 counties.

*Influenza*—From Montgomery, Pender and Sampson.

*Malarial Fever*—From Caswell, Sampson and Wilson.

*Measles*—From Alamance, Burke, Caldwell, Chatham, Cleveland, Columbus, Edgecombe, Franklin, Granville, Greene, Johnston, Lenoir, Martin, Montgomery, Nash, New Hanover, Orange, Randolph, Richmond, Sampson, Wayne and Wilson—22 counties.

*Mumps*—From Davidson.

*Pneumonia*—From Cherokee, Edgecombe, Franklin, Henderson, Iredell, McDowell, Orange, Sampson and Wilson—9 counties.

*Rheumatism*—From Caswell, Cherokee and Orange.

*Roseola*—From Alamance.

*Rotheln*—From Davidson and New Hanover.

*Searlatina*—From Montgomery.

*Tonsillitis*—From Orange.

*Typhoid Fever*—From Catawba, Granville, Henderson, Macon, Mitchell, New Hanover and Randolph—7 counties.

*Whooping-cough*—From Alamance, Alexander, Burke, Caldwell, Carteret, Cumberland, Davidson, Granville, Greene, Mitchell, Montgomery, Nash, New Hanover, Sampson, Stokes and Wayne—16 counties.

*Summary of Reports from County Superintendents of Health for March, 1892.*

*Alamance*—Dr. G. W. Long, Graham. There is not a great deal of sickness in the county except measles, pertussis and roseola, which have prevailed in an uncomplicated form and to a limited extent. The new Home for the Aged is under way.

*Alexander*—Dr. J. B. Watts, Taylorsville. Whooping-cough and intestinal troubles have been the prevailing diseases during the past month. The sanitary condition of the county is remarkably good. That of the public buildings is about the same as at the last report, with no efforts at improvement.

*Ashe*—No Board of Health.

*Alleghany*—No Board of Health.

*Anson*—Dr. E. F. Ashe, Wadesboro No report.

*Beaufort*—Dr. S. T. Nicholson, Washington. No report.

*Bertie*—No Board of Health.

*Bladen*—Dr. N. Robinson, Elizabethtown.  
No report.

*Brunswick*—No Board of Health.

*Buncombe*—Dr. C. E. Hilliard, Asheville.  
No diseases of special moment have prevailed  
in the county. The sanitary condition of the  
county is good. That of the public buildings  
is very good.

*Burke*—Dr. J. L. Laxton, Morganton. A  
few cases of measles and whooping-cough have  
been reported. The sanitary condition of the  
county is good, with very little sickness of any  
kind. The sanitary condition of the public  
buildings is about the same as at last report.

*Cabarrus*—No Board of Health.

*Caldwell*—Dr. A. A. Kent, Lenoir. Measles  
and whooping-cough of mild form have pre-  
vailed to a limited extent. The sanitary con-  
dition of the county is as good as could be  
desired. The new sewer pipes have been  
placed in the jail and its condition is much  
improved. That of the poor-house is good.

*Camden*—No Board of Health.

*Carteret*—Dr. M. F. Arendell, Morehead  
City. The sanitary condition of the county is  
good. The public buildings are old, but com-  
fortable and clean.

*Caswell*—Dr. R. H. Williamson, Yancey-  
ville. Rheumatism, bronchitis and remittent  
fever have prevailed. The sanitary condition of  
the county is good. That of the public  
buildings is very good.

*Catawba*—Dr. G. H. West, Newton.  
Whooping-cough has prevailed in Newton and  
the vicinity. Four cases of typhoid fever have  
been reported. The sanitary condition of the  
county, as far as I can learn, is good.

*Chatham*—Dr. H. T. Chapin, Pittsboro.  
The sanitary condition of the county is very  
good. The general health of the people is  
splendid. A few cases of measles have been  
reported. The sanitary condition of the pub-  
lic buildings is good. We have one insane  
patient at the Home, but application has been  
made for his admission to the State Hospital.

*Cherokee*—Dr. J. F. Abernathy, Murphy.  
There have been four or five cases of rheuma-  
tism and about as many of pneumonia reported.  
There have been no other complaints during

the month. The hospital and jail are in fair  
condition. Our town is neat and clean, and  
the adjacent country has been improved by  
some needed draining of old stagnant ponds.

*Chowan*—No Board of Health.

*Clay*—No Board of Health.

*Cleveland*—Dr. O. P. Gardner, Shelby.  
Eight cases of measles have been reported.  
Other than this there have been no diseases of  
any importance. The sanitary condition of the  
county is good. Also that of the public build-  
ings.

*Columbus*—Dr. I. Jackson, Whiteville.  
There have been reported only a few cases of  
measles. The sanitary condition of the county  
and the public buildings is good.

*Craven*—Dr. Leinster Duffy, New Bern.  
No report.

*Cumberland*—Dr. J. H. Marsh, Fayette-  
ville. Whooping-cough has prevailed in many  
portions. The sanitary condition of the county  
is good. That of the public buildings is also  
good; some improvements have been made at  
the poor-house during the month.

*Currituck*—No Board of Health.

*Dare*—No Board of Health.

*Davidson*—Dr. R. L. Payne, Jr., Lexing-  
ton. Whooping-cough, rotheln and mumps  
have prevailed in all parts of the county. The  
sanitary condition of the county is fairly good.  
The same can be said of the public buildings.

*Davie*—No Board of Health.

*Duplin*—Dr. J. W. Blount, Kenansville.  
The health of the county is very good, there  
being but little sickness of any kind. Hear of  
some cases of hog cholera. The sanitary con-  
dition of the public buildings is moderately  
good.

*Durham*—Dr. N. M. Johnson, Durham.  
The sanitary condition of the county has been  
very good. That of the public buildings is also  
good.

*Edgecombe*—Dr. D. Williams, Tarboro.  
Measles has prevailed in all parts of the county,  
and often complicated with bronchitis and  
pneumonia. The death rate has been large.  
The sanitary condition of the public buildings  
is good.

*Franklin*—Dr. E. S. Foster, Louisburg.

There is no sickness in the county with the exception of measles, which is sometimes complicated with bronchitis and pneumonia. The health of our county, so far as I can learn, was never better.

*Forsyth*—Dr. D. N. Dalton, Winston. No report.

*Gaston*—Dr. J. H. Jenkins, Dallas. No report.

*Gates*—No Board of Health.

*Graham*—No Board of Health.

*Granville*—Dr. Patrick Booth, Oxford. A few cases each of measles and whooping-cough and two of typhoid fever have been reported. The sanitary condition of the county is fair, and improving with enlightenment on the subject of sanitary matters. That of the public buildings is unchanged.

*Greene*—Dr. E. H. Sugg, Snow Hill. Measles and whooping-cough have prevailed. The sanitary condition of the county is, as usual, good. That of the public buildings is also good.

*Guilford*—Dr. E. R. Michaux, Greensboro. No report.

*Halifax*—No report from the Superintendent of Health.

*Harnett*—No Board of Health.

*Haywood*—Dr. J. H. Way, Waynesville. A few sporadic cases of erysipelas and catarrhal diseases of mild form have prevailed. The sanitary condition of the county is fairly good. That of the public buildings, as usual, is not good.

*Henderson*—Dr. J. L. Egerton, Hendersonville. There have been reported several cases of pneumonia and one of typhoid fever. The sanitary condition of the county is good.

*Hertford*—No Board of Health.

*Hyde*—No Board of Health.

*Iredell*—Dr. M. W. Hill, Statesville. The sanitary condition of the county is very good. Have heard of one case of pneumonia only. There has been no serious or general sickness over the county. The sanitary condition of the public buildings is about as usual, and there are no efforts at improvement. The jail cannot be made what it should be under its present faulty construction. Punishment by imprison-

ment injures physically, but does not intimidate or reform. There is more power in the old time whipping-post to deter evil-doers than in both county and State prisons, and it costs much less.

*Jackson*—Dr. J. M. Candler, Dillsboro. The sanitary condition of the county is very good; also that of the public buildings.

*Johnston*—Dr. L. L. Sasser, Smithfield. Pulmonary troubles have prevailed. There has been an epidemic of hog cholera. Twenty cases of measles reported. The sanitary condition of the county is good. There has been less sickness during April than in any month of the past four. The sanitary condition of the public buildings is good.

*Jones*—No Board of Health.

*Lenoir*—Dr. C. B. Woodley, Kinston. Measles has prevailed in nearly all portions of the county. Dysentery, influenza, bronchitis and hepatic congestion with slight fevers have been reported. The jail is in good sanitary condition. There is no poor-house in the county.

*Lincoln*—Dr. W. L. Crouse, Lincolnton. No report.

*Macon*—Dr. J. M. Lyle, Franklin. Two cases of diphtheria and three of typhoid fever have been reported. The sanitary condition of the county is good; also that of the public buildings.

*Madison*—No Board of Health.

*Martin*—Dr. W. H. Harrell, Williams'ton. Measles has prevailed in several portions of the county. The general health of the county is remarkably good. Very little sickness of any kind. The sanitary condition of the public buildings is very good. They have lately been white-washed and the grounds limed.

*McDowell*—Dr. J. H. Gilkey, Marion. Pneumonia and bronchitis have prevailed pretty extensively, but we have had little other sickness. Sanitary condition of the county is good, as is also that of the public buildings, as far as their construction will admit of. We hope soon to get the Commissioners to erect new buildings at the Home.

*Mecklenburg*—No Board of Health.

*Mitchell*—Dr. C. E. Smith, Bakersville.

Fifteen cases of whooping-cough and one of typhoid fever have been reported. Pertussis is spreading rapidly on Cane Creek, and is of a violent form. Other than this the sanitary condition of the county is good. That of the public buildings is fair.

*Montgomery* — Dr. F. E. Asbury, Asbury. I have to report fifteen cases of measles, three of diphtheria, eight of whooping-cough, ten of scarlatina and influenza. Hog cholera has been epidemic. The sanitary condition of the public buildings is good.

*Moore* — Dr. Gilbert McLeod, Carthage. No report.

*Nash* — Dr. J. J. Mann, Nashville. Measles, whooping-cough and dysentery are prevailing in most parts of the county. The sanitary condition of the county has been good. The sanitary condition of the public buildings is good. We are trying to have a new building erected at the poor-house.

*New Hanover* — Dr. F. W. Potter, Wilmington. The increased number of deaths from heart disease and pneumonia are considered due to *la grippe*. I urged the thorough cleansing of streets, lots, etc. There have been reported four cases of rotheln, twenty-four of measles, thirty of whooping cough, one of diphtheria and one of typhoid fever. As far as we can learn the sanitary condition of the county is fairly good. Since the subsidence of *la grippe* the distemper among horses and hogs has almost entirely ceased. Owing to the greater use of the jail during the last term of the Court its condition is not so good. The sanitary condition of the other public buildings is good.

*Northampton* — Dr. H. W. Lewis, Jackson. No report.

*Onslow* — No Board of Health.

*Orange* — Dr. D. C. Parris, Hillsboro. There have been reported a few cases of measles. Catarrhal diseases have prevailed in all parts of the county. The sanitary condition of the county is better for this month than for any during the year. Rheumatism, pneumonia, tonsillitis, etc., have prevailed in a mild form. The sanitary condition of the Home is good, but that of the jail is not so good.

*Pamlico* — No Board of Health.

*Pasquotank* — No Board of Health.

*Pender* — Dr. S. S. Satchwell, Burgaw. It has been generally healthy in this county during April. Mild catarrhal affections have prevailed to a limited extent, and some few cases of *la grippe*. Our public buildings are in fair sanitary condition.

*Perquimans* — No Board of Health.

*Person* — No Board of Health.

*Pitt* — Dr. B. T. Cox, Redallia. No report.

*Polk* — No Board of Health.

*Randolph* — Dr. J. M. Boyette, Ashboro. One case of measles and one of typhoid fever have been reported. The sanitary condition of the county is good, according to reports just received. Cholera among hogs and chickens, and distemper among horses has prevailed to a considerable extent the past month. The sanitary condition of the public buildings is satisfactory. I think bed-bugs at the Home are things of the past. The bedding is clean and the inmates well fed and cared for.

*Richmond* — Dr. J. M. Stancill, Rockingham. There has been very little sickness, except measles of mild form and a few cases of dysentery. The sanitary condition of the public buildings is good except the poor-house, which needs improvement—new buildings and different arrangements for confining incurable lunatics.

*Robeson* — Dr. R. F. Lewis, Lumberton. Little sickness has prevailed in any part of the county. The sanitary condition of the county is good, as also that of the public buildings.

*Rockingham* — No Board of Health.

*Rowan* — Dr. J. J. Summerell, Salisbury. The sanitary condition of the town and county is good. There has been no sickness. The jail could be improved, but there has been no effort in that direction yet.

*Rutherford* — Dr. W. Thompson, Cliffdale. No report.

*Sampson* — Dr. J. A. Stevens, Clinton. There has been an epidemic of hog cholera. The sanitary condition of the county is fairly good. During the past month the following diseases have occurred: Influenza, measles, whooping-cough, bronchitis, pneumonia, diar-

rheœa, dysentery, and a few cases of malarial fever. The jail was condemned by the grand jury this week, and a new one asked for. The poor-house is in excellent sanitary condition.

*Stanly*—Dr. Boyles, New London. No report.

*Stokes*—Dr. J. W. Neal, Meadows. There have been reported fourteen cases of whooping-cough. The sanitary condition of the county is good. That of the public buildings is also good.

*Surry*—No Board of Health.

*Swain*—No Board of Health.

*Transylvania*—No Board of Health.

*Tyreell*—Dr. Ab. Alexander, Columbia. No report.

*Union*—Dr. W. C. Ramsay, Monroe. No report.

*Vance*—Dr. A. Cheatham, Henderson. No remarks on prevailing diseases or the sanitary condition of the county. The sanitary condition of the public buildings is good.

*Wake*—Dr. James McKee, Raleigh. No epidemic of any kind has prevailed in the city or county. There have occurred two cases of glanders in horses, the animals being promptly destroyed and buried deep under the soil. The

sanitary condition of the county is good. That of all the public buildings is remarkably good.

*Warren*—Dr. P. J. Macon, Warrenton. No report.

*Washington*—No Board of Health.

*Watauga*—Dr. W. B. Councill, Boone. No report.

*Wayne*—Dr. John Spicer, Goldsboro. A few cases of measles and whooping-cough have occurred. The sanitary condition of the county is good. Bowel troubles seem to be giving rise to more trouble than any other class of diseases. The sanitary condition of the public buildings is good.

*Wilkes*—No Board of Health.

*Wilson*—Dr. Albert Anderson, Wilson. Measles prevail in the county. Pneumonia, bronchitis and malarial fevers are reported from different parts of the county.

*Yadkin*—Dr. T. R. Harding, Yadkinville. No report.

*Yancey*—Dr. J. L. Ray, Burnsville. No diseases of importance have prevailed. The sanitary condition of the county is very good, better than usual. Poor-house well kept; jail only moderately so.

*Condition of Jails and Poor-houses by Counties for April, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Alamance.....	2				38 (a).....			
Alexander.....					12	450	.....	4
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....	30		0		45 (b).....		0	
Burke.....	4	600	0	2	8	800	2	2
Cabarrus.....								
Caldwell.....	2	*	0	2	7	*	3	3
Camden.....								
Carteret.....	0				0			
Caswell.....	3	630			22	1,000	9	3
Catawba.....	6		3	4	28		12	20
Chatham.....	0				24			
Cherokee.....					3			
Chowan.....								
Clay.....								
Cleveland.....	18		8		22			4
Columbus.....	6	*		1	15	*		0
Craven.....								
Cumberland.....	5				15			
Currituck.....								
Dare.....								
Davidson.....	4	1,000	0	1	24	721	0	3
Davie.....								
Duplin.....	1				8			
Durham.....	5	1,000		2	34 (c)	1,000		5
Edgecombe.....	6	*	2	1	22	*	4	5
Forsyth.....								

\*Space exceeds one thousand cubic feet. (a) Includes 4 in house of correction. (b) Includes 20 in house of correction. (c) Includes 18 in house of correction

*Condition of Jails and Poor-houses by Counties for April, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Franklin .....	5				20			
Gaston .....								
Gates .....								
Graham .....								
Granville.....	1	*	0		31 (a)	*	13	
Greene.....	1	500		1	10	1,000		1
Guilford .....								
Halifax .....								
Harnett .....								
Haywood.....	4		0	3				
Henderson .....	6				2			
Hertford .....								
Hyde .....								
Iredell .....	10	*			21 (b)	462		
Jackson .....	4	200						
Johnston .....	5	*	4	3	11	*	4	4
Jones .....								
Lenoir .....	5	*						
Lincoln .....								
McDowell.....	3	600	1	0	9	500	2	0
Macon .....	2	*	0	2				
Madison .....								
Martin .....	4	*	2	3	11	800	2	2
Mecklenburg .....								
Mitchell .....	2				4			
Montgomery .....								
Moore .....								
Nash .....	8	600	4	5	27	1,000	3	6
New Hanover.....	24	600	11	10	17 (c)	1,000	14	9
Northampton .....								
Onslow .....								
Orange .....	1	*	1	0	25	*	10	7
Pamlico .....								

\* Space exceeds one thousand cubic feet. (a) Includes 9 in house of correction. (b) Poor house has been abolished. (c) Includes 3 in house of correction.

*Condition of Jails and Poor-houses by Counties for April, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evi- dence of success- ful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number give- ing evi- dence of success- ful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....								
Perquimans.....								
Person.....								
Pitt.....								
Polk.....								
Randolph.....	5				30			
Richmond.....	9				7			
Robeson.....	15	460			9	800		
Rockingham.....								
Rowan.....	17	500	1	3	17	*	4	1
Rutherford.....								
Sampson.....	3				20			
Stanly.....								
Stokes.....	4	600			18	500	4	3
Surry.....								
Swain.....								
Transylvania.....								
Tyrrell.....								
Union.....								
Vance.....	10	935			14	*		
Wake.....	6	*			116 (a)			
Warren.....								
Washington.....								
Watanya.....								
Wayne.....	6	952	0	2	4	*	0	0
Wilkes.....								
Wilson.....	4				23			
Yadkin.....								
Yancey.....	6	550	2	5	1	*		

\* Space exceeds one thousand cubic feet. (a) Includes 57 in house of correction.

*Mortuary Report for April, 1892.*

**Meteorological Summary for North Carolina, April, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										NO. OF DAYS					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.
Asheville .....	54.2	76	28	65.2	26	10	43.3	50	21.9	65.2	6.01	13	8	9	8	S. W.
Bakersville .....	51.6	78	29	64.3	22	11	38.9	56	25.4	.....	4.90	9	5	16	8	W.
Charlotte .....	56.6	78	3	65.5	31	10	47.9	47	17.6	.....	3.50	11	7	12	11	S. W.
Chapel Hill .....	57.0	84	5	68.6	27	9	45.4	57	23.2	.....	3.15	.....	.....	12	.....	
Douglas .....	54.9	85	5	69.5	23	10	40.4	62	29.1	.....	2.52	8	15	7	6	S. W.
Rock House Farm .....	52.4	72	3	60.8	23	10	41.0	49	16.8	74.4	7.26	8	9	13	13	S. E.
Hendersonville .....	51.7	75	28	61.8	28	30	48.7	45	13.1	71.9	6.85	5	6	19	6	W.
Kitty Hawk .....	55.5	81	5	62.4	36	10	48.8	45	13.6	.....	1.94	12	8	10	15	S. W.
Littleton .....	54.3	83	5	67.0	25	11	41.3	58	25.7	.....	3.00	11	5	11	10	.....
Linville .....	47.1	62	12	56.7	22	3	37.5	40	19.2	.....	3.75	17	8	5	11	.....
Lenoir .....	54.1	77	5	60.6	29	11	46.6	48	14.0	.....	3.10	.....	.....	.....	10	.....
Morganton .....	55.8	77	5	62.8	31	11	48.8	46	14.0	74.2	4.05	.....	.....	.....	8	.....
Mount Airy .....	53.2	79	5	63.3	22	11	43.0	57	20.3	.....	2.65	9	8	13	6	S. W.
Oak Ridge .....	54.8	79	5	65.1	26	12	41.0	53	21.1	71.6	3.08	8	9	13	14	S. W.
Pittsboro .....	55.0	78	5	63.2	26	10	46.9	52	16.3	.....	2.70	8	10	12	6	S. W.
Raleigh .....	57.2	82	5	67.0	30	10	47.3	52	19.7	68.7	5.57	9	10	11	11	S. W.
Southport .....	57.8	72	23	63.8	32	10	51.9	40	11.9	.....	0.80	10	12	8	11	S. W.
Southern Pines .....	58.6	84	5	72.5	25	10	44.6	59	27.9	.....	3.62	13	3	14	9	S.
Salisbury .....	58.5	76	5	66.2	38	11	50.8	38	15.4	.....	1.01	.....	.....	.....	11	.....
Weldon .....	56.0	84	5	66.4	28	11	45.7	56	20.7	.....	4.38	.....	.....	.....	10	.....
Willeyton .....	55.5	84	5	67.8	26	12	43.2	58	24.6	.....	5.00	10	9	11	8	.....
Wilmington .....	60.2	80	5	68.2	35	10	52.2	45	16.0	73.8	1.43	6	13	11	11	S. W.

## STATE METEOROLOGICAL SUMMARY FOR APRIL, 1892.

Mean Barometer 30.13 inches; normal for April, 30.02.

Highest Barometer 30.49 inches, on the 27th, at Lynchburg, Va.

Lowest Barometer 29.56 inches, on the 14th, at Norfolk, Va.

Mean temperature 56.3 degrees; normal for April, 57.7 degrees.

Highest temperature 89, on the 5th, at Marion.

Lowest temperature 22, on the 11th, at Bakersville.

Average rain-fall, 4.03 inches; normal for April, 3.81.

Greatest monthly rain-fall, 9.38 inches, at Murphy.

Least monthly rain-fall, 0.80 inches, at Southport.

Average number of cloudless days, 10.

Average number of partly cloudy days, 9.

Average number of cloudy days, 11.

Average number of rainy days, 11.

Prevailing wind direction, south-west; average hourly velocity, .96 miles. Prevailing direction from many years' observations, south-west. Average velocity, .96 miles per hour.



# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

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W. H. HARRELL .. . Williamston.  
J. A. HODGES, M. D., .. . Fayetteville.

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J. L. LUDLOW, C. E., .. . Winston.

THOMAS F. WOOD, M. D., *Secretary and Treasurer*, Wilmington.

Entered at the post-office at Wilmington, N. C., as second-class mail matter.

VOL. VII.

JUNE, 1892.

NO. 3.

## *Summary of Reports from County Superintendents of Health for May, 1892.*

*Alamance*—Dr. George W. Long, Graham. Measles, whooping-cough and intestinal troubles have prevailed. The sanitary condition of the public buildings is as good as usual. A new Home for the Aged and Infirm is about to be constructed.

*Alexander*—Dr. J. B. Watts, Taylorsville. Bowel troubles have been very prevalent, with a few cases of measles and whooping-cough. The sanitary condition of the county has been very good during the past month. That of the public buildings is about as at the last report, but think there will be a new building erected for the benefit of the paupers of the county at an early date.

*Alleghany*—No Board of Health.

*Anson*—Dr. E. F. Ashe, Wadesboro. No report.

*Ashe*—No Board of Health.

*Beaufort*—Dr. S. T. Nicholson, Washington. No report.

*Bertie*—No Board of Health.

*Bladen*—Dr. N. Robinson, Elizabethtown. No report.

*Brunswick*—No Board of Health.

*Buncombe*—Dr. C. E. Hilliard, Asheville. No report.

*Burke*—Dr. J. L. Laxton, Morganton. The sanitary condition of the county is good, with comparatively little sickness. A few cases of dysentery and whooping-cough have been reported. The sanitary condition of the public buildings is the same as at last report, with no efforts at improvement nor any likely to be soon.

*Cabarrus*—No Board of Health.

*Caldwell*—Dr. A. A. Kent, Lenoir. The sanitary condition of the county is good, with a few mild cases of cholera-morbus, dysentery and diarrhoea. There have also been reported two cases of measles and one of scarlatina. The sanitary condition of the public buildings is fairly good.

*Camden*—No Board of Health.

*Carteret*—Dr. M. F. Arendell, Beaufort. The sanitary condition of the county is good. Our public buildings are old, but safe and comfortable.

*Caswell*—Dr. R. H. Williamson, Yanceyville. Remittent fever and dysentery have prevailed. The sanitary condition of the county is good; also that of the public buildings.

*Catawba*—Dr. G. H. West, Newton. Dysentery has prevailed in portions of the county. There have been reported three cases of whooping-cough and two of typhoid fever. The sanitary condition of the county is about as usual. The Board of Magistrates and Commissioners in conjoint session authorized the County Commissioners to put the jail in good condition. Also to make needed improvements at the county poor-house as regards repairing and putting up new buildings.

*Chatham*—Dr. H. T. Chapin, Pittsboro. The health of the county during the early part of the month was excellent. During the latter part there have been a number of cases of dysentery. The public buildings are in good condition.

*Cherokee*—Dr. J. F. Abernathy, Murphy. There are a few cases of dysentery here, but no other sickness to my knowledge. The jail and hospital are in splendid condition.

*Chowan*—No Board of Health.

*Clay*—No Board of Health.

*Cleveland*—Dr. O. P. Gardner, Shelby. The sanitary condition of the county is good, as also that of the public buildings.

*Columbus*—Dr. I. Jackson, Whiteville. The sanitary condition of the county is good. Diarrhoea of a mild type has prevailed. I hear of one case of pertussis and a few of intermittent fever. The sanitary condition of the public buildings is good.

*Craven*—Dr. L. Duffy, Newberne. No report.

*Cumberland*—Dr. J. H. Marsh, Fayetteville. The sanitary condition of the county is good. The town is in better condition than it has been for several years. The sanitary condition of the public buildings is good.

*Currituck*—No Board of Health.

*Dare*—No Board of Health.

*Davidson*—Dr. R. L. Payne, Jr., Lexington. Mumps, rotheln and whooping-cough have prevailed. The sanitary condition of the county is good. Also that of the public buildings.

*Davie*—No Board of Health.

*Duplin*—Dr. J. W. Blount, Kenansville. No report.

*Durham*—Dr. N. M. Johnson, Durham. The healthfulness of the county is as good as usual at this season of the year, being the season for dysentery and other bowel troubles. The sanitary condition of the public buildings is good.

*Edgecombe*—Dr. D. Willianis, Tarboro. Whooping-cough has prevailed in some parts of the county. Measles has about disappeared from the county. The sanitary condition of the public buildings is very good.

*Forsyth*—Dr. D. N. Dalton, Winston. No report.

*Franklin*—Dr. E. S. Foster, Louisburg. Measles prevails in most parts of the county. With this exception, and a few cases of dysentery, there is less sickness in the county than I have ever known. The sanitary condition of the public buildings is very good.

*Gaston*—Dr. J. H. Jenkins, Dallas. No report.

*Gates*—No Board of Health.

*Graham*—No Board of Health.

*Granville*—Dr. P. Booth, Oxford. Measles, dysentery and diarrhoea have prevailed in nearly all portions of the county. The sanitary condition of the county is fairly good. That of the public buildings is unchanged since the last report, except that the jail has been cleaned and disinfected, and a liberal use of whitewash at the poor-house grounds.

*Greene*—Dr. E. H. Sugg, Snow Hill. Dysentery has prevailed in the county, and there have been reported a few cases of whooping-cough. The sanitary condition of the county is good. That of the public building is also good.

*Guilford*—Dr. E. R. Michaux, Greensboro. No report.

*Halifax*—No report from the Superintendent of Health.

*Harnett*—No Board of Health.

*Haywood*—Dr. J. H. Way, Waynesville. No report.

*Henderson*—Dr. J. L. Egerton, Hendersonville. There have been reported two cases of

measles and one of typhoid fever. Several cases of diarrhoea and a few sporadic cases of dysentery have been reported. The sanitary condition of the county and the public building is good.

*Hertford*—No Board of Health.

*Hyde*—No Board of Health.

*Iredell*—Dr. M. W. Hill, Statesville. Whooping-cough and typhoid fever have occurred. The sanitary condition of the county is very good, there having been but very little general sickness over the county. The typhoid fever is in one family and the whooping-cough over the county. The sanitary condition of the public building is about as it has been reported heretofore. There is no effort at improvement, nor likely to be soon, judging from the report of the Grand Jury.

*Jackson*—Dr. J. M. Candler, Hillsboró. There has been reported one case of typhoid fever. The sanitary condition of the county was never better. We have three small towns in the county, and as Superintendent of Health, I am looking after their sanitary condition. That of the public building is good.

*Johnston*—Dr. L. L. Sasser, Smithfield. Diarrhoea and dysentery have been the prevailing diseases during the month. There have been a few cases of measles reported. Hog cholera has occurred.

*Jones*—No Board of Health.

*Lenoir*—Dr. C. B. Woodley, Kinston. Measles has prevailed in all parts of the county. There have occurred some dysentery, bronchitis and malarial fever.

*Lincoln*—Dr. W. L. Crouse, Lincolnton. There have been reported two cases of whooping-cough and one of diphtheria. Dysentery has prevailed in all parts of the county. There is the usual amount of bowel troubles but few fatal cases. Both jail and poor-house are well kept. Are kept clean and whitewashed regularly. There are no efforts at further improvements.

*Macon*—Dr. J. M. Lyle, Franklin. The sanitary condition of the county is good. There has been one case of typhoid fever reported. The sanitary condition of the public buildings is also good.

*Madison*—No Board of Health.

*Martin*—Dr. W. H. Harrell, Williamston. Measles and enteric troubles have prevailed in all sections. With these exceptions and that of four cases of typhoid fever reported, the health of the county has been good. There have been some mild cases of malarial fever. The sanitary condition of the public buildings is good.

*McDowell*—Dr. J. H. Gilkey, Marion. Pneumonia, diarrhoea and dysentery have prevailed in some parts of the county. With these exceptions, the health and sanitary condition of the county have been good. The sanitary condition of the public buildings is as good as their character will admit of. I shall urge the Board of Commissioners and Magistrates at their conjoint meeting to buy a new site and erect better buildings for the care of the poor.

*Mecklenburg*—No Board of Health.

*Mitchell*—Dr. C. E. Smith, Bakersville. Pertussis has prevailed in this and Cane Creek sections. The sanitary condition of the county is exceptionally good. Still hear now and then of a case of la grippe of mild type, and as yet no deaths. Pertussis is still spreading, but no deaths reported. The sanitary condition of the public buildings is good.

*Montgomery*—Dr. F. E. Asbury, Asbury. There have been reported eight cases of whooping-cough and ten of scarlatina. The sanitary condition of the county is good, better than it has been for some time. The sanitary condition of the poor-house is good, but that of the jail is in a poor condition. No efforts at present for improvement.

*Moore*—Dr. G. McLeod, Carthage. No report.

*Nash*—Dr. J. J. Mann, Nashville. No report.

*New Hanover*—Dr. F. W. Potter, Wilmington. Measles and whooping-cough have prevailed in nearly all portions of the county, and there have been reported six cases of typhoid fever, and one each of scarlatina and hemorrhagic malarial fever. The sanitary condition of most of the county is good. Quite a large number of white families have recently moved into the city, consequently we have had a large number of cases of measles and whooping-cough, as

few of their children had said diseases prior to their sojourn here. Diarrhoeal diseases have been quite prevalent. The sanitary condition of the jail and house of correction is good, and that of the poor-house is fair.

*Northampton*—Dr. H. W. Lewis, Jackson. The health of the county has been good for the month of May. The sanitary condition of the county is fairly good. There has been a mild epidemic of dysentery, but no fatal cases as yet reported. The sanitary condition of the jail and poor-house is good. The jail is a recent improvement, and cost \$10,000; it is a sanitary structure, and a credit to our county. It is filled with patent water-closets and soil-pipes, properly ventilated, steel cells, separate apartments for males and females, etc.

*O�试*—No Board of Health.

*Orange*—Dr. D. C. Parris, Hillsboro. There have been a few cases of measles reported. Diarrhoeal diseases have prevailed in all parts of the county. The sanitary condition of the county is fairly good. There has been reported some pneumonia, mild and amenable. The sanitary condition of the public buildings is good, save that of the county jail, which lacks the proper arrangement for the disposal of human excrement.

*Pamlico*—No Board of Health.

*Pasquotank*—No Board of Health.

*Pender*—Dr. S. S. Satchwell, Burgaw. The health of the county has been generally good during the month, except bowel diseases especially among children. The sanitary condition of the public buildings is good. Drainage is more and more practiced by our citizens, and its advantages to health and agriculture acknowledged and appreciated. Malaria is gradually leaving our borders and its cause disappearing.

*Perquimans*—No Board of Health.

*Person*—No Board of Health.

*Pitt*—Dr. B. T. Cox, Reddallia. Dysentery, diarrhoea and intermittent fevers have prevailed, and a few cases of measles, whooping-cough and chicken-pox still linger.

*Polk*—No Board of Health.

*Randolph*—Dr. J. M. Boyette, Ashboro. From official reports the sanitary condition of

the county is better than for the past year. Pneumonia and measles have prevailed to some extent, and dysentery has made its appearance in full force. There has also been reported some whooping-cough. Distemper and pink-eye among horses have diminished. Hog and chicken-cholera are prevailing in some parts of the county. The condition of the County Home was much improved on my last visit—the clothing of the inmates, the bedding, houses, etc., were as clean as could be expected under the existing circumstances. The cells are much cleaner than at any previous visit.

*Richmond*—Dr. J. M. Stansill, Rockingham. There have been reported fifteen cases of measles, four of whooping-cough, and one of diphtheria. The sanitary condition of the public buildings is good, except the poor-house, which needs improvement badly. We have had a great deal of dysentery during the month, mostly of a mild character, though I have heard of two or three deaths.

*Robeson*—Dr. R. F. Lewis, Lumberton. Measles has prevailed in some parts of the county, and whooping-cough and typhoid fever have been reported. The sanitary condition of the county is very fair. That of the jail and court-house good. The removal of the poor-house is continually urged.

*Rockingham*—No Board of Health.

*Rowan*—Dr. J. J. Summerell, Salisbury. I have received no reports, and hear of no sickness. I think the county is very free from disease for this season of the year. I have had some mild cases of diarrhoea and dysentery. Our public buildings are in good condition. I hear that the County Commissioners have recently ordered that the water shall not be used so freely as heretofore, and I fear the result, but will try to convince them that they are not acting wisely or humanely.

*Rutherford*—Dr. W. Thompson, Cliffdale. No report.

*Sampson*—Dr. J. A. Stevens, Clinton. The sanitary condition of the county is fairly good. We have had some cases of whooping-cough, measles, pneumonia, dysentery, diarrhoea, malarial fever, and one case of typhoid fever. There has been an epidemic of hog cholera,

and there have been reported two rabid dogs in the upper part of the county. The sanitary condition of the poor-house is very good. We are to have a new jail, which is greatly needed.

*Stanly*—Dr. Boyles, New London. No report.

*Stokes*—Dr. J. W. Neal, Meadows. The sanitary condition of the county is good. The health of the county has been unusually good during the past month. There is some dysentery at this time, but of a mild form. The sanitary condition of the public buildings is good.

*Surry*—No Board of Health.

*Swain*—No Board of Health.

*Transylvania*—No Board of Health.

*Tyrrell*—Dr. Ab. Alexander, Columbia. No report.

*Union*—Dr. W. D. Pemberton, Monroe. The health of the town is good, except for dysentery and diarrhoea, prevalent especially among children.

*Vance*—Dr. A. Cheatham, Henderson. No report on the sanitary condition of the county and the prevailing diseases.

*Wake*—Dr. James McKee, Raleigh. The sanitary condition of the county is very good. There have been reported three cases of varicella and one of typhoid fever. There have occurred several deaths among the cows in the city in parturition, due to peritonitis. The sanitary condition of all the public buildings is good.

*Warren*—Dr. P. J. Macon, Warrenton. No report.

*Washington*—No Board of Health.

*Watauga*—Dr. W. B. Councill, Boone. There have been reported ten cases of scarlatina and two of typhoid fever. *La Grippe* has prevailed in all parts of the county. The sanitary condition of the county is good in every particular; also that of the public buildings.

*Wayne*—Dr. John Spicer, Goldsboro. No report.

*Wilkes*—No Board of Health.

*Wilson*—Dr. A. Anderson, Wilson. Whooping-cough, measles, malarial fever, and dysen-

tery have prevailed in all parts of the county. The sanitary condition of the county is good. The sanitary condition of the Home is good, but that of the jail is not good, but some improvements are being made. The court-house is in moderately good condition.

*Yadkin*—Dr. T. R. Hardling, Yadkinville. No report.

*Yancey*—Dr. J. L. Ray, Burnsville. The sanitary condition of the county is very good at present. The poor-house is very well kept, but the jail is not kept as clean as it should be.

### Summary of Mortuary Reports for May, 1892.

(EIGHTEEN TOWNS.)

	White.	Col'd.	Total.
Aggregate population.	52,500	43,560	96,060
Aggregate deaths.....	76	70	146
Annual death-rate per 1,000 represented,	17.4	19.3	18.2
Deaths under 5 years old,			71
<i>Causes of death.</i>			
Typhoid fever.....	1	2	3
Malarial fever.....	3	1	4
Measles .....	2	0	2
Pneumonia .....	4	2	6
Consumption .....	8	14	22
Brain diseases.....	3	4	7
Heart diseases.....	5	2	7
Neurotic diseases....	2	3	5
Diarrhoeal diseases...	16	9	25
All other diseases....	25	23	48
Accident .....	0	1	1
Suicide.....	1	0	1
Still-born.....	6	9	15
	76	70	146

### Review of Diseases for May, 1892.

*Bronchitis*—Was reported from Lenoir.

*Chicken-Cholera*—From Randolph.

*Cholera-morbus*—From Caldwell.

*Diarrhoea*—From Alamance, Alexander, Caldwell, Columbia, Granville, Henderson, Johnston, Martin, McDowell, Orange, Pender, Pitt, Rowan, Sampson, Union—15 counties.

*Diphtheria*—From Lincoln and Richmond.

*Dysentery*—From Alamance, Alexander, Burke, Caldwell, Caswell, Catawba, Chatham, Cherokee, Durham, Franklin, Granville, Greene, Johnston, Lenoir, Lincoln, Martin, McDowell, Northampton, Orange, Pender, Pitt, Randolph, Richmond, Rowan, Sampson, Stokes, Union—27 counties.

*Hog Cholera*—From Randolph and Sampson.

*La Grippe*—From Mitchell and Watauga.

*Malarial Fever*—From Caswell, Columbus, Lenoir, Martin, Pitt, Sampson, Wilson—7 counties.

*Malarial Fever, Hemorrhagic*—From New Hanover.

*Measles*—From Alamance, Alexander, Caldwell, Franklin, Granville, Henderson, Johnston, Lenoir, Martin, New Hanover, Orange,

Pitt, Randolph, Richmond, Robeson, Sampson, Wilson—17 counties.

*Mumps*—From Davidson.

*Pneumonia*—From McDowell, Orange, Randolph, Sampson—4 counties.

*Rotheln*—From Davidson.

*Scarlatina*—From Caldwell, Montgomery, New Hanover, Watauga—4 counties.

*Typhoid Fever*—From Catawba, Henderson, Iredell, Jackson, Macon, Martin, New Hanover, Sampson, Wake, Watauga—10 counties.

*Varicella*—From Pitt and Wake.

*Whooping-cough*—From Alamance, Alexander, Burke, Catawba, Columbus, Davidson, Edgecombe, Greene, Iredell, Lincoln, Mitchell, Montgomery, New Hanover, Pitt, Richmond, Robeson, Sampson, Wilson—18 counties.

*Condition of Jails and Poor-houses by Counties for May, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....	4				30			
Alexander.....	0				12	450	0	4
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....								
Burke.....	4	600			7	1,000		
Cabarrus.....								
Caldwell.....	2	*	0	2	7	*	3	3
Camden.....								
Carteret.....	1	*	0	0	0			
Caswell.....	3	550			22	1,000	9	3
Catawba.....	6		3	2	29		10	12
Chatham.....	2				26			
Cherokee.....	4				3			
Chowan.....								
Clay.....								
Cleveland.....					23	997		4
Columbus.....	12	*		6	9	*		0
Craven.....								
Cumberland.....	6				15			
Currituck.....								
Dare.....								
Davidson.....	5	*		1	24	721		2
Davie.....								
Duplin.....								
Durham.....	7	1,000		2	34 (a)	1,000		6
Edgecombe.....	10	*	3	5	20	*	2	6
Forsyth.....								

\*Space exceeds one thousand cubic feet. (a) Includes 18 in house of correction.

*Condition of Jails and Poor-houses by Counties for May, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Franklin.....	4				20			
Gaston.....								
Gates.....								
Graham.....								
Granville.....	2	*		0	31 (a)	*		11
Greene.....	1	500		1	10	1,000		1
Guilford.....								
Halifax.....								
Harnett.....								
Haywood.....								
Henderson.....	9				2			
Hertford.....								
Hyde.....								
Iredell.....	12	955			24	462		
Jackson.....	4	200	2	2				
Johnston.....								
Jones.....								
Lenoir.....								
Lincoln.....	20	885		10	23	400		5
McDowell.....	4	550	0	1	9	600	2	0
Macon.....	0				0			
Madison.....								
Martin.....	5	1,000	2	4	9	1,000		1
Mecklenburg.....								
Mitchell.....	4				5			
Montgomery.....	5			1	14		1	2
Moore.....								
Nash.....								
New Hanover.....	18	600	12	6	25 (b)	1,000	16	13
Northampton.....	7							
Onslow.....								
Orange.....	5	*	1	1	25	*	10	6
Pamlico.....								

\* Space exceeds one thousand cubic feet. (a) Includes 10 in house of correction. (b) Includes 7 in house of correction.

*Condition of Jails and Poor-houses by Counties for May, 1892.—Continued.*

COUNTIES.	JAIL.					POOR-HOUSE.				
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evi- dence of success- ful vac- cination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evi- dence of success- ful vac- cination.	Number who can read and write.		
Pasquotank.....										
Pender.....	3									
Perquimans.....										
Person.....										
Pitt.....						23				
Polk.....										
Randolph.....	1					30				
Richmond.....	11		3	3		8		1	0	
Robeson.....	5	*				7	1,000			
Rockingham.....										
Rowan.....	6	1,000	0	3		17	*	4	2	
Rutherford.....										
Sampson.....	3					29				
Stanly.....										
Stokes.....	3	700				18	600	3	4	
Surry.....										
Swain.....										
Transylvania.....										
Tyrrell.....										
Union.....										
Vance.....	5	*				14	*			
Wake.....	9	*				129 (a)				
Warren.....										
Washington.....										
Watauga.....	1					7				
Wayne.....										
Wilkes.....										
Wilson.....	2	*	0	0		26	*	6	5	
Yadkin.....										
Yancey.....	2	*	4	2		1				

\* Space exceeds one thousand cubic feet. (a) Includes 58 in house of correction.

*Mortuary Report for May, 1892.*

**Meteorological Summary for North Carolina, May, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

## TEMPERATURE (Degrees Fahr.).

## NO. OF DAYS

STATIONS.	Monthly Mean.						Mean Daily Range.			Mean Humidity.	Total Precipitation.	Cloudiness.				Prevailing Wind.
	Month	Year	Highest Date	Lowest Date	Mean Maximum	Mean Minimum	Monthly Range	Mean Daily Range	Cloudless	Partly Cloudy	Cloudy	Rainy	Cloudless	Partly Cloudy	Cloudy	
Asheville.....	63.0	86	14	75.1	38	25	50.9	48	24.2	63.8	2.76	18	8	5	11	N.
Bakersville.....	59.8	86	6	74.1	32	24	45.4	51	28.7	.....	3.49	13	0	18	9	W.
Charlotte.....	68.2	89	4	78.6	48	1	57.9	41	20.7	.....	2.28	15	8	8	9	S.
Chapel Hill.....	69.2	95	6	81.9	42	23	56.4	53	25.5	.....	3.59	.....	.....	8	.....	
Douglas.....	66.2	97	6	84.6	34	23	47.9	63	36.7	.....	1.80	19	8	4	7	W.
Rock House Farm.....	62.0	86	5	72.1	38	21	52.0	48	20.1	.....	4.06	12	12	7	10	S. W.
Columbus.....	62.2	84	6	73.2	40	24	53.1	44	38.1	.....	2.25	16	9	6	7	N.
Kitty Hawk.....	66.3	88	1	74.0	47	1	58.6	41	15.4	.....	3.44	16	9	6	11	S. W.
Littletown.....	61.2	90	15	76.8	34	14	51.7	56	25.1	.....	3.21	19	6	6	8	.....
Linville.....	61.5	80	28	71.8	33	11	51.2	47	20.6	.....	4.82	14	10	7	9	.....
Lenoir.....	61.6	85	6	73.2	44	1	56.9	41	16.3	.....	4.40	.....	.....	10	.....	
Morganton.....	67.4	88	6	75.4	51	25	59.0	37	16.4	.....	4.22	.....	.....	8	.....	
Mount Airy.....	63.4	90	6	76.6	38	24	50.1	52	26.5	.....	3.59	14	11	6	7	S. W.
Oak Ridge.....	66.6	90	6	78.1	41	23	55.2	49	22.9	.....	3.29	15	8	8	7	S. W.
Pittsboro.....	66.7	90	6	76.5	42	1	56.9	48	19.6	.....	4.26	12	11	5	5	S. W.
Raleigh.....	67.6	91	6	77.5	45	9	57.7	46	19.8	66.8	3.10	15	8	8	10	S. W.
Southport.....	68.1	81	27	73.5	52	23	62.6	29	10.9	.....	3.39	22	5	1	6	S. W.
Southern Pines.....	69.1	95	6	81.6	41	23	53.5	54	31.1	.....	5.27	21	5	5	10	S.
Salisbury.....	70.9	87	6	77.8	51	24	63.7	36	14.1	.....	2.72	.....	.....	5	.....	
Weldon.....	68.2	92	6	80.2	41	9	56.2	51	24.0	.....	3.57	20	3	8	7	S.
Willeyton.....	66.5	92	6	78.8	40	9	54.2	52	21.6	.....	3.70	12	6	13	7	.....
Wilmington.....	69.7	86	16	77.7	49	9	61.7	37	16.0	74.0	1.64	9	19	3	6	S. W.

## STATE METEOROLOGICAL SUMMARY FOR MAY, 1892.

Mean Barometer 30.04 inches; normal for May, 30.01.

Highest Barometer 30.17 inches, on the 1st, at Hatteras.

Lowest Barometer 29.61 inches, on the 22d, at Kitty Hawk.

Mean temperature 66.8 degrees; normal for May, 66.9 degrees.

Highest temperature 97, on the 6th, at Douglas.

Lowest temperature 32, on the 21th, at Bakersville.

Average rain-fall, 3.60 inches; normal for May, 4.20.

Greatest monthly rain-fall, 5.27 inches, at Southern Pines.

Least monthly rain-fall, 1.61 inches, at Wilmington.

Average number of cloudless days, 15.

Average number of partly cloudy days, 10.

Average number of cloudy days, 6.

Average number of rainy days, 9.

Prevailing wind direction, south-west; average hourly velocity, 8.7 miles. Prevailing direction from many years' observations, south-west. Normal velocity, 7.8 miles per hour.



# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

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THOMAS F. WOOD, M. D., *Secretary and Treasurer*, Wilmington.

Entered at the post-office at Wilmington, N. C., as second-class mail matter.

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JULY, 1892.

NO. 4.

## *Cholera.*

The *Morning Star* of the 22d instant gives the following cablegram from London:

"July 21. A dispatch to the *Lancet* from Paris says, that cholera in the suburbs of that city is stationary and exhibits no tendency to extension within fortifications. Officially the disease is styled 'epidemic cholera informe.' It develops so slowly that time for preparation to combat it can be readily taken. It does not seem to have taken root within the walls of the city."

Notwithstanding the name given to the disease in Paris, the Spanish Medical Commission sent to investigate it, pronounced it Asiatic Cholera, and the Spanish Government immediately took steps to keep it out of their borders.

## *Summary of Reports from County Superintendents of Health for June, 1892.*

ALAMANCE—Dr. G. W. Long, Graham. Whooping-cough and intestinal troubles have prevailed but are subsiding. An occasional case of fever heard from. New cottages are being built at the Home.

ALEXANDER—Dr. J. B. Watts, Taylorsville.

Diarrhoeal troubles have prevailed, and there have been two cases of typhoid fever reported. The sanitary condition of the county is good as far as I can learn. That of the public buildings is about the same as at last report. There is a movement on foot for the erection of a new home for the poor.

ALLEGHANY—No Board of Health.

ANSON—Dr. E. F. Ashe, Wadesboro. No report.

ASHE—No Board of Health

BEAUFORT—Dr. S. T. Nicholson, Washington. No report.

BERTIE—No Board of Health.

BLADEN—Dr. N. Robinson, Elizabethtown. No report.

BRUNSWICK—No Board of Health.

BUNCOMBE—Dr. C. E. Hilliard, Asheville. Dysentery has prevailed in some parts of the county. The sanitary condition of the county and the public buildings is good.

BURKE—Dr. J. L. Laxton, Morganton. There has been one case of typhoid fever reported. The sanitary condition of the county is good. Less sickness of any kind than there has been for several years at this season. A few cases of diarrhoea and dysentery have been

reported, mostly among children. The condition of the public buildings is about the same as at last report.

CABARRUS—No Board of Health.

CALDWELL—Dr. A. A. Kent, Lenoir. No report.

CAMDEN—No Board of Health.

CARTERET—Dr. M. F. Arendell, Morehead City. The sanitary condition of the county is good, as is also that of the public buildings.

CASWELL—Dr. R. H. Williamson, Yanceyville. Remittent fever and dysentery have prevailed. The sanitary condition of the county is good; also that of the public buildings.

CATAWBA.—Dr. G. H. West, Newton. Dysentery and diarrhoea have prevailed in the central and eastern portions of the county. As far as can be learned, the sanitary condition is about as good as usual. There have been reported four cases of typhoid fever. Repairs will be soon made at the jail in regard to sewerage system. New houses will be built at the poor-house soon as the Board of Magistrates and Commissioners have so ordered.

CHATHAM—Dr. H. T. Chapin, Pittsboro. The sanitary condition of the county during the month has been good. A few cases of dysentery have been reported. The latter part of the month was very wet. The sanitary condition of the public buildings is good.

CHEROKEE.—Dr. J. F. Abernathy, Murphy. No report.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. Dysentery has prevailed in many parts of the county. There have been reported several cases of typhoid fever. The sanitary condition of the county is good, and also that of the public buildings.

COLUMBUS—Dr. I. Jackson, Whiteville. The sanitary condition of the county has been good. Diarrhoea has prevailed among children, but of a mild type. We have had in the last two or three weeks a few cases of malarial and typhoid fever, and a case or two of whooping-

cough. The sanitary condition of the public buildings is very good.

CRAVEN—No Board of Health.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. A few cases of whooping-cough have been reported. The sanitary condition of the county is good. The town is in better condition than it has been for years. The sanitary condition of the public buildings is good.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. No report.

DAVIE—No Board of Health.

DUPLIN—Dr. J. W. Blount, Kenansville. The sanitary condition of the county is good. A few cases of malarial fever, diarrhoea and dysentery have occurred, but generally yielded to treatment in a few days. The sanitary condition of the public buildings is fairly good. I am glad to state that our county officers are becoming convinced of the necessity and importance of paying more attention to the condition and management of the public buildings.

DURIHAM—Dr. N. M. Johnson, Durham. The health of the county for the month of June has been remarkably good, with fewer deaths than usual. The sanitary condition of the public buildings is very good.

EDGECOMBE—Dr. Donald Williams, Tarboro. Whooping-cough has prevailed in all parts of the county. There has been an excess of rain in the county in June, and the sanitary condition is not very good. The death rate among infants has been large from diarrhoeal diseases, complicated with whooping-cough. The sanitary condition of the public buildings is good.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. S. Foster, Louisburg. Whooping-cough has prevailed to some extent in town and the surrounding country. So far as I can learn, the sanitary condition of the county is good. Dysentery prevails in some portions and I hear of two cases of typhoid fever. The sanitary condition of the public buildings is good.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. P. Booth, Oxford. A few cases of measles have occurred and there have been reported three cases of typhoid fever. Diarrhoeal diseases in mild form have prevailed in all parts of the county. The sanitary condition of the county remains about the same as at last report. That of the public buildings is unchanged.

GREENE—Dr. E. H. Sugg, Snow Hill. Dysentery has prevailed, with a few cases of malarial fever. The sanitary condition of the county is tolerably good; that of the public buildings is good.

GUILFORD—Dr. E. R. Michaux, Greensboro. No report.

HALIFAX—No Board of Health.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. H. Way, Waynesville. No report.

HENDERSON—Dr. J. L. Egerton, Hendersonville. The sanitary condition of the county is very good. A few cases of mumps have been reported.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. M. W. Hill, Statesville. The sanitary condition of the county has been pretty good. Dr. Hill reports two fatal cases of typhoid fever in his own family. There is another case in a different part of the town. Whooping-cough has been reported also. The public buildings are in their usual sanitary condition.

JACKSON—Dr. J. M. Candler, Dillsboro. No report.

JOHNSTON—Dr. L. L. Sasser, Smithfield. Dysentery and bowel troubles have been the prevailing diseases. There has been some chicken cholera. The sanitary condition of the county is good.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. A mild form of dysentery has prevailed in some

sections. Two cases of typhoid fever have been reported. The sanitary condition of the county is good, so far as can be learned, except in so far as recent rains have affected it. The jail is not occupied, but when last visited was in good condition.

LINCOLN—Dr. W. L. Crouse, Lincolnton. Typhoid fever and dysentery have prevailed in some portions of the county; there has also been some whooping-cough. There is but little sickness of any kind—less than usual at this season of the year. The sanitary condition of the public buildings is good. No sickness during the month.

MACON—Dr. J. M. Lyle, Franklin. The sanitary condition of the county is good. There has been one case of typhoid fever only reported. That of the public buildings is good.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. The sanitary condition of the county is good—less sickness than I have ever known at this season. A few cases of mild malarial fever and some diarrhoeal troubles, with an occasional case of dysentery and measles constitute the prevailing sickness for the month. There have also been reported two cases of whooping-cough. The sanitary condition of the public buildings is good.

MCDOWELL—Dr. J. H. Gilkey, Marion. No report.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville. An epidemic of influenza has prevailed in nearly all parts of the county. The sanitary condition of the county is good. There have been reported about ten cases of whooping-cough. The sanitary condition of the public buildings is better than for the past 18 months. Both the keeper of the jail and of the almshouse are performing their duty toward the inmates to the very best advantage.

MONTGOMERY—Dr. E. E. Asbury, Asbury. Dysentery has prevailed in all parts of the county. There have been reported fifteen cases of measles, ten of whooping-cough, five of scarlatina, five of typhoid fever, three of

pernicious malarial fever, and two of haemorrhagic malarial fever. As far as I can learn, the sanitary condition of the county is tolerably good. There has been an epidemic of hog cholera. There has been no change in the condition of the public buildings since the last report.

MOORE—Dr. Gilbert McLeod, Carthage. No report.

NASH—Dr. J. J. Mann, Nashville. We are having a great deal of typho-malarial fever in the county. The sanitary condition of the county is very good. The sanitary condition of the public buildings is very good indeed.

NEW HANOVER—Dr. F. W. Potter, Wilmington. You will notice that our death-rate for June is comparatively small, but there has been a good deal of sickness, and if there have been few deaths from diseases peculiar to the locality, the physicians are entitled to more thanks than the authorities. In May I requested the Aldermen to have less digging done. I urge now, as I have always done, the thorough cleaning of the city of trash, etc., while other things should be left off until said object should be accomplished. So far as I can learn the sanitary condition of the county is good—only a few cases of continued fever on the seacoast, Measles and whooping-cough are subsiding. There have been reported eleven cases of measles, seventeen of whooping-cough, one of scarlatina, eighteen of typhoid fever. The jail is in good condition, with the oft-repeated exception of the floor, which needs cementing. The other public buildings are in good sanitary condition.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. No report.

ONSLOW—Dr. E. L. Cox, Jacksonville. Dysentery has prevailed in the upper part of the county. The sanitary condition of the county is good. Hog cholera has prevailed in part of the county. The sanitary condition of the public buildings is good.

ORANGE—Dr. D. C. Parris, Hillsboro. I have to report cholera-infantum, diarrhoea, cholera-morbus and dysentery in most all portions of the county. A fatal case of typhoid fever reported. Catarrhal fever has prevailed

extensively, and in many cases has been severe in form, closely simulating grippe. Measles, in mild form, has prevailed in all parts of the county. Two cases of cholera-morbus resembled closely Asiatic cholera. The resemblance to genuine cholera was in the great prostration, cramps of severe form, rice-colored stools and algid condition. Erysipelas in a severe form has occurred, and also a few cases of mild rheumatism. Puerperal and septicaemic fevers have occurred. Follicular tonsillitis and pharyngitis have been of frequent occurrence, and there have been a few cases of remittent fever. Doubtless the damp hot weather caused much of the dysentery and diarrhoea, and has also been a factor in causing the catarrhal fever. The sanitary condition of the county is not so good, owing to the continued wet weather and the absence of sunshine. The sanitary condition of the public buildings is good, except the jail.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. S. S. Satchwell, Burgaw. The general health of the county is good. There is a remarkable increase of insanity among the negroes, especially among the women. It is an interesting study for the physician why such a large percentage of our insane are negro women.

PITT—Dr. R. T. Cox, Redallia. No report.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Asheboro. Reports from all parts of the county show the sanitary condition good. There have been reported one case of measles, five of whooping-cough and two of typhoid fever. Cholera is prevailing among hogs. Dysentery has prevailed all over the county. The sanitary condition of the public buildings is good.

RICHMOND—Dr. J. M. Stansill, Rockingham. There has been a great deal of dysentery and a few cases of typho-malarial fever reported. There was very little sickness of any other kind. Two cases of whooping-cough and two of typhoid fever reported. The sanitary condition of the public buildings is good, except at the poor-house, which ought to be torn down and new buildings erected.

ROBESON—Dr. R. F. Lewis, Lumberton. A good deal of sickness, principally malarial fever and bowel troubles, have prevailed. Considering the heavy rain-fall, the sanitary condition of the county is good. Whooping-cough has occurred. There has been no improvement at the Home. The sanitary condition of the other public buildings is good.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Whooping-cough and typhoid fever have prevailed in some parts of the county. The sanitary condition of the county is good; also that of the public buildings.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. Enterocolitis and dysentery have prevailed in all parts of the county. The sanitary condition of the county is better than usual at this season. The health of the people is better than last year. The sanitary condition of the public buildings is as good as the poor buildings will admit of. We need a new jail and poor-house badly, and I will urge our Commissioners to build one with modern sanitary improvements.

SAMPSON—Dr. J. A. Stevens, Clinton. The sanitary condition of most of the county is good. Measles and whooping-cough have been very prevalent, and there are a few cases of typhoid and malarial fevers. Many cases of dysentery and diarrhoea with several deaths. The sanitary condition of the poor-house is good, but the jail is in bad condition.

STANLY—Dr. A. C. Boyles, New London. The health of the county is very good, with little sickness of any kind. The sanitary condition of the public buildings is tolerably good.

STOKES—Dr. J. W. Neal, Meadows. The sanitary condition of the county is good. There have been reported twenty-three cases of whooping-cough, two of diphtheria, and four of typhoid fever. The sanitary condition of the public buildings is good.

SURRY—No Board of Health.

SWAIN—No Board of Health.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander, Columbia. Cholera-infantum has prevailed in the town of

Columbia. The sanitary condition of the county is good. There have been reported nineteen cases of measles and one of typhoid fever. The public buildings have been recently repaired.

UNION—Dr. W. D. Pemberton, Monroe. Considerable diarrhoeal trouble and some malarial fevers. No typhoid fever. Our town is doing all its money will allow for the prevention of disease. The colored people are poorly cared for.

VANCE—Dr. A. Cheatham, Henderson. The sanitary condition of the public buildings is good.

WAKE—Dr. Jas. McKee, Raleigh. Only one case of typhoid fever has been officially reported, but three death certificates from typhoid fever have been returned. The sanitary condition of the county is good. That of the public buildings is also good.

WARREN—Dr. J. J. Macon, Warrenton. No report.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Councill, Boone. Scarletina and whooping-cough have prevailed in some parts of the county. They are of a mild form with no deaths. There have been some bowel troubles and one case of typhoid fever reported. The sanitary condition of the county and of the public buildings is good. The jail is new, with all modern improvements, and the poor-house cottages are new and clean and healthy.

WAYNE—Dr. John Spicer, Goldsboro. There have occurred a few cases of measles and whooping-cough. Also some continued fever. The sanitary condition of the county is good. There has been some hog cholera. The sanitary condition of the public buildings is good.

WILKES—No Board of Health.

WILSON—Dr. A. Anderson, Wilson. Dysentery, diarrhoea and malarial fevers have prevailed in all parts of the county. The sanitary condition of the county is not good, but there is and has been for some time an improvement. The sanitary condition of the public buildings is good.

YADKIN—Dr. T. R. Harding, Yadkinville. Dysentery has prevailed in nearly all portions

of the county, and of very fatal character among children. The sanitary condition of the county, in most localities, is good. Some places are not drained as well as they should be to keep off malaria, consequently we have some malarial fever at this season of the year. Our poor-house is in good condition—all new buildings. The jail was burnt some time ago, but the contract has been let for the erection of a new one. It will be on the modern plan.

**YANCEY**—Dr. J. L. Ray, Burnsville. The sanitary condition of the county is very good at present. There have been reported three cases of typhoid fever. The jail is not well kept. The poor-house is moderately well kept.

#### Summary of Mortuary Reports for June, 1892.

(EIGHTEEN TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population.	51,000	41,800	92,800
Aggregate deaths.....	80	91	171
Annual death-rate per 1,000 represented,	18.8	26.1	22.1
Deaths under 5 years of age,			95
<i>Causes of death.</i>			
Typhoid fever.....	2	3	5
Malarial fever.....	2	2	4
Whooping-cough .....	1	3	4
Consumption .....	6	11	17
Brain diseases.....	6	2	8
Heart diseases.....	8	4	12
Neurotic diseases.....	0	3	3
Diarrhoeal diseases....	31	28	59
All other diseases....	17	29	46
Accident .....	0	3	3
Still-born.....	7	3	10
	80	91	171

#### Review of Diseases for June, 1892.

**Catarrhal fever**—Was reported from Orange (simulating grippé).

**Chicken cholera**—From Johnson.

**Cholera-infantum**—From Orange and Tyrrell.

**Cholera-morbus**—From Orange.

**Diarrhoea**—From Alamance, Alexander, Burke, Catawba, Columbus, Duplin, Edgecombe, Granville, Martin, Orange, Robeson, Rutherford, Sampson and Wilson—14 counties.

**Diphtheria**—From Stokes.

**Dysentery**—From Alamance, Buncombe, Burke, Caswell, Catawba, Chatham, Cleveland, Duplin, Edgecombe, Franklin, Greene, Johnston, Lenoir, Lincoln, Martin, Montgomery, Onslow, Orange, Randolph, Richmond, Robeson, Rutherford, Sampson, Wilson and Yadkin—25 counties.

**Erysipelas**—From Orange.

**Hog cholera**—From Martin, Onslow, Randolph and Wayne—4 counties.

**Influenza**—From Mitchell.

**Malarial fever**—From Caswell, Columbus, Duplin, Greene, Martin, New Hanover, Orange, Robeson, Sampson, Wayne and Wilson—11 counties.

**Malarial fever, haemorrhagic**—From Montgomery.

**Malarial fever, pernicious**—From Montgomery.

**Measles**—From Granville, Martin, Montgomery, New Hanover, Orange, Randolph, Sampson, Tyrrell and Wayne—9 counties.

**Mumps**—From Henderson.

**Rheumatism**—From Orange.

**Scarlatina**—From Montgomery, New Hanover and Watauga—3 counties.

**Typhoid fever**—From Alexander, Burke, Catawba, Cleveland, Columbus, Franklin, Greene, Iredell, Lenoir, Lincoln, Macon, Montgomery, New Hanover, Orange, Randolph, Richmond, Rowan, Sampson, Stokes, Tyrrell, Wake and Yancey—22 counties.

**Typho-malarial**—From Nash and Richmond.

**Whooping-cough**—From Alamance, Columbus, Cumberland, Edgecombe, Franklin, Iredell, Lincoln, Martin, Mitchell, New Hanover, Randolph, Richmond, Rowan, Stokes, Sampson, Watauga and Wayne—17 counties.

*Condition of Jails and Poor-houses by Counties for June, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Alamance.....	5 (a) .....				34 .....			
Alexander.....					11 .....	550	0	3
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....	19 .....		0 .....		49 (b) .....		0 .....	
Burke.....	3 .....	800	1 .....		7 .....	1,000	2	3
Cabarrus.....								
Caldwell.....								
Camden.....								
Carteret.....	1 .....	*	0 .....	0				
Caswell.....	3 .....	500		1	22 .....	1,000	9	3
Catawba.....	8 .....		2 .....	4	30 .....		12	9
Chatham.....					24 .....			
Cherokee.....								
Chowan.....								
Clay.....								
Cleveland.....	4 .....			2	22 .....	997		4
Columbus.....	13 .....	*		6	10 .....	*		0
Craven.....								
Cumberland.....	9 .....				14 .....			
Currituck.....								
Dare.....								
Davidson.....								
Davie.....								
Duplin.....	2 .....				7 .....			
Durham.....	2 .....	1,000			35 (c) .....	1,000	3	2
Edgecombe.....	9 .....	*	5 .....	6	18 .....	*	3	5
Forsyth.....								

\*Space exceeds one thousand cubic feet. (a) Includes 4 in house of correction. (b) Includes 29 in house of correction. (c) Includes 18 in house of correction.

*Condition of Jails and Poor-houses by Counties for June, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	6	.....	.....	.....	22	.....	.....	.....
Gaston.....	.....	.....	.....	.....	.....	.....	.....	.....
Gates.....	.....	.....	.....	.....	.....	.....	.....	.....
Graham .....	.....	.....	.....	.....	.....	.....	.....	.....
Granville.....	5	*	.....	.....	31 (a)	*	12	7
Greene.....	1	500	.....	.....	10	1,000	.....	1
Guilford.....	.....	.....	.....	.....	.....	.....	.....	.....
Halifax.....	.....	.....	.....	.....	.....	.....	.....	.....
Harnett.....	.....	.....	.....	.....	.....	.....	.....	.....
Haywood.....	.....	.....	.....	.....	.....	.....	.....	.....
Henderson .....	5	.....	.....	.....	2	.....	.....	.....
Hertford.....	.....	.....	.....	.....	.....	.....	.....	.....
Hyde.....	.....	.....	.....	.....	.....	.....	.....	.....
Iredell.....	5	*	.....	.....	22	504	.....	.....
Jackson.....	.....	.....	.....	.....	.....	.....	.....	.....
Johnston .....	.....	.....	.....	.....	.....	.....	.....	.....
Jones.....	.....	.....	.....	.....	.....	.....	.....	.....
Lenoir.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln .....	9	850	.....	.....	23	450	.....	.....
McDowell.....	.....	.....	.....	.....	.....	.....	.....	.....
Macon.....	0	.....	.....	.....	0	.....	.....	.....
Madison .....	.....	.....	.....	.....	.....	.....	.....	.....
Martin.....	4	*	2	3	9	1,000	2	2
Mecklenburg .....	.....	.....	.....	.....	.....	.....	.....	.....
Mitchell.....	1	.....	.....	.....	5	.....	.....	.....
Montgomery.....	5	.....	.....	.....	13	.....	.....	.....
Moore.....	.....	.....	.....	.....	.....	.....	.....	.....
Nash.....	1	690	.....	1	22	1,909	3	5
New Hanover.....	20	600	11	10	20 (b)	1,000	13	9
Northampton.....	.....	.....	.....	.....	.....	.....	.....	.....
Onslow .....	1	*	.....	.....	3	*	1	.....
Orange.....	7	512	2	2	.....	*	.....	.....
Pamlico .....	.....	.....	.....	.....	.....	.....	.....	.....

\* Space exceeds one thousand cubic feet. (a) Includes 10 in house of correction. (b) Includes 7 in house of correction.

*Condition of Jails and Poor-houses by Counties for June, 1892.—Continued.*

COUNTIES.	JAIL.					POOR-HOUSE.			
	Number Prisoners confined,	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in,	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	
Pasquotank.....									
Pender.....									
Perquimans .....									
Person.....									
Pitt .....									
Polk .....									
Randolph.....	5					30			
Richmond.....	12		4	5	9		1	1	
Robeson.....	4	*			10	720			
Rockingham.....									
Rowan.....	10	700	5	7	16	*	6	2	
Rutherford.....	4	*			24	*			
Sampson.....	3				19				
Stanly.....	1				11				
Stokes.....	4	500			18	400	5	3	
Surry .....									
Swain.....									
Transylvania .....									
Tyrrell.....	0				0				
Union.....									
Vance.....	4	*			13	*			
Wake.....	10	*			119 (a)				
Warren.....									
Washington.....									
Watauga.....	2				7				
Wayne.....	7	952			4	*			
Wilkes.....									
Wilson .....	2	*	0	0	18	*	5	4	
Yadkin.....					19		0	5	
Yancey .....	4	768	1	1	1				

\* Space exceeds one thousand cubic feet. (a) Includes 47 in house of correction.

*Mortuary Report for June, 1892.*

**Meteorological Summary for North Carolina, June, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										No. of Days					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.						
											Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.	
Asheville.....	70.0	88	15	80.7	49	14	59.3	38	21.4	74.1	7.00	17	12	1	18	N.
Bakersville.....	70.2	89	26	82.8	48	14	57.7	41	25.1	.....	5.92	20	3	7	13	W.
Charlotte.....	76.3	96	25	86.0	60	12	66.6	36	19.4	.....	5.51	10	9	11	14	S. E.
Chapel Hill.....	78.0	102	24	90.5	50	11	65.5	52	25.0	.....	6.12	.....	.....	.....	15	.....
Douglas.....	77.0	100	18	92.5	50	12	61.4	50	31.1	.....	8.55	12	0	20	10	S. W.
Columbus.....	67.4	82	13	74.3	52	13	60.4	30	13.9	.....	12.72	6	23	1	19	N.
Horse Cove.....	69.4	85	16	78.5	54	9	60.3	31	18.2	80.2	17.02	10	9	11	18	N. E.
Kitty Hawk.....	75.2	91	25	81.6	61	5	68.7	30	12.9	.....	6.58	10	13	7	14	S. W.
Littleton.....	76.4	99	24	88.7	52	7	61.2	47	24.5	.....	4.49	12	4	8	11	.....
Louisburg.....	75.3	93	24	82.5	50	11	68.1	43	14.4	.....	8.36	6	13	11	14	S. W.
Lenoir.....	72.5	88	16	79.8	62	30	67.5	26	12.3	.....	8.20	.....	.....	.....	15	.....
Morganton.....	74.3	90	24	82.7	62	12	69.6	28	13.1	77.6	8.63	.....	.....	.....	16	.....
Mount Airy.....	73.9	93	18	84.6	51	12	63.2	42	21.4	.....	4.45	11	5	14	14	S. W.
Oak Ridge.....	74.9	94	25	85.0	52	12	64.8	42	20.2	.....	6.84	9	11	10	17	S. W.
Pittsboro.....	75.5	92	21	83.2	52	13	67.8	40	15.4	.....	4.55	0	21	9	10	S. W.
Raleigh.....	75.8	96	24	84.7	52	12	66.8	44	17.9	80.0	4.84	7	9	14	16	S.
Southport.....	75.4	88	24	79.4	63	28	71.2	25	8.2	.....	4.52	5	17	8	13	S. W.
Southern Pines.....	77.1	103	24	91.1	51	12	63.1	52	28.0	.....	4.96	19	8	3	11	S. W.
Salisbury.....	79.3	92	24	85.5	65	12	73.1	27	12.4	.....	4.67	.....	.....	.....	12	.....
Weldon.....	77.3	98	24	87.4	49	12	67.2	38	20.2	.....	5.11	9	1	20	16	S.
Washington.....	76.4	97	24	87.9	50	14	64.9	47	23.0	.....	11.75	.....	.....	.....	18	.....
Wilmington.....	76.2	92	24	82.0	61	12	70.2	31	11.8	83.4	6.13	2	19	9	16	S. W.

## STATE METEOROLOGICAL SUMMARY FOR JUNE, 1892.

Mean Barometer 30.01 inches; normal for June, 30.02.

Highest Barometer 30.37 inches, on the 1st, at Hatteras.

Lowest Barometer 29.73 inches, on the 27th, at Lynchburg.

Mean temperature 75.5 degrees; normal for June, 71.4 degrees.

Highest temperature 103, on the 24th, at Southern Pines.

Lowest temperature 48, on the 14th, at Bakersville.

Average rain-fall, 6.90 inches; normal for June, 4.34.

Greatest monthly rain-fall, 17.02 inches, at Rock House Farm (Horse Cove).

Least monthly rain-fall, 2.70 inches, at Hatteras.

Average number of cloudless days, 10.

Average number of partly cloudy days, 12.

Average number of cloudy days, 8.

Average number of rainy days, 14.

Prevailing wind direction, south-west; average hourly velocity, 7.8 miles. Prevailing direction from many years' observations, south-west. Average velocity, 7.0 miles per hour.



# BULLETIN OF THE NORTH CAROLINA BOARD OF HEALTH.

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H. T. BAHNSON, M. D., *Pres.*, Salem.  
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W. H. HARRELL ..... Williamston.  
J. A. HODGES, M. D., ..... Fayetteville.

S. WESTRAY BATTLE, M. D., ..... Asheville.  
J. H. TUCKER, M. D., ..... Henderson.  
PROF. F. P. VENABLE, ..... Chapel Hill.  
J. L. LUDLOW, C. E., ..... Winston.

THOMAS F. WOOD, M. D., *Secretary and Treasurer*, Wilmington.

Entered at the post-office at Wilmington, N. C., as second-class mail matter.

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AUGUST, 1892.

NO. 5.

THOMAS F. WOOD, M. D., LL.D.

Dr. Thomas Fanning Wood, the able Secretary of the North Carolina Board of Health, died at his residence in this city about 2 o'clock yesterday, the 22d of August, 1892.

The State of North Carolina has lost a son, than whom none were more jealous of her honor and her welfare. The cause of sanitary reform and of medical progress in the State, and in the country at large, has lost a most earnest and diligent advocate and worker, whose place will indeed be hard to fill. Let every citizen of our State, who can appreciate the services of one whose undying energies have for so many years been given for the honor of his State and the welfare of her people, bow the head in sorrow at their loss.

At the Fayetteville meeting of the Medical Society of the State of North Carolina a committee was appointed to memorialize the Legislature for the establishment of a State Board of Health. The result of this action was the enactment of a law making the State Society the Board of Health. At the next meeting of the Society, in 1877, a committee was appointed who should perform the arduous duties thus imposed upon the Society. Dr. S. S. Satchwell

was made the Chairman of this Committee, and Dr. Wood the Secretary and Treasurer. Uninterruptedly, from that date to the time of his death, Dr. Wood has held the office of Secretary and Treasurer of the Board of Health, making its success the chief ambition of his life, and giving to the work his untiring devotion and labor.

At the time of the passage of the act creating the Board of Health, the amount of \$100 per year was appropriated for the use of the Board. Until the recent act of 1885, which put the Board on a better financial basis, the State appropriation was much too little to meet the actual expenses for stationery and postage incident to the necessary instruction of the people in the methods of sanitation, and in exciting in the State profession an interest in the work; but he had the work at heart and it must not fail, so when the appropriation was exhausted he drew with an unstinting hand upon his own small store, suffering personal privations that this public work might go on to success.

Great was his satisfaction when the Legislature of 1885 created the Board of Health as it exists to-day, enabling it to do better service. Only those who were with him, and to whom he would open his mind on the subject, could know the deep anxiety with which he awaited

the action of the Legislature, or the true pleasure that its final action gave him. As soon as the word reached him that his bill had become a law, he engaged the services of an assistant and proceeded to have county boards of health organized, and to establish a voluntary system of mortuary reports from the larger towns of the State. He worked assiduously during that year, and when for the treatment of his fatal malady it became necessary for him to keep his bed *twenty months*, during those anxious days his interest did not flag, but his eye was ever on the watch for rocks and breakers, while his hand still held the wheel that directed the ship in its progress.

But his works were too many and too great and good for even a bare mention of them in this brief notice, which is written while this issue of the BULLETIN is in the hands of the compositor. A more extended notice will appear in another place by one more fitted to make known the deeds and sound the merited praise of this valued and honored citizen, this wise and skillful physician, this loving and sympathetic friend, this noble and true Christian.

### The Cholera.

The latest returns from the infected districts of Europe, as taken from the press dispatches of the 24th of August, are to the following effect:

ST. PETERSBURG, Aug. 23.—Official returns of new cases of cholera yesterday and deaths, show a decrease compared with Sunday's figures of 15 cases, and an increase of 111 deaths. The total number of new cases reported yesterday was 6,806; total deaths 3,429.

HAMBURG, Aug. 23.—Cholera is chiefly prevalent in Alstadt, or the old portion of the city, comparatively few cases occurring in the Nevstadt or the new portion. Every precaution possible is being taken to localize the disease. A number of new cases were reported to-day.

TEHERAN, Aug. 23.—A dispatch from Renshid, in the province of Ghilan, states that every day hundreds of persons are dying there from cholera. Renshid is a very unhealthy place, and sanitary methods are unknown. It lies on the Caspian Sea, and is the center of

the importing trade of the province in which it is located. Most all imports are from Russia. Other cities are also suffering.

WASHINGTON, Aug. 23.—Although no real fears that cholera will reach the United States is expressed by the authorities of the Treasury Department, they are taking all the precautions deemed necessary to prevent its introduction. Circulars have hitherto been issued to Customs officers directing the disinfecting of baggage from cholera infected ports. Assistant Secretary Spaulding was in conference today with Dr. Austin, Acting Surgeon General of the Marine Hospital Service, in regard to further precautionary steps.

Official information has been received that Asiatic cholera exists in Hamburg and Havre, and port officers at New York and Baltimore have been so informed. Hamburg authorities have heretofore insisted that the disease was choleric. At Hamburg yesterday there were 120 cases of cholera. Many deaths were reported.

Consul Williams, at Havre, reports an epidemic of Asiatic cholera at that place, with many deaths, and advises inspection of the fast liner La Touraine.

These facts have been promptly communicated to the health officers at Staten Island, and every precaution will be taken, especially in view of the fact that the epidemic has now reached two of the most important ports in Europe with which the United States has direct and rapid communication.

### Some Reasons for Daily Exercise.

1. Any man who does not take time for exercise will probably have to take time to be ill.
2. Body and mind are both gifts, and for the proper use of them our Maker will hold us responsible.
3. Exercise gradually increases the physical powers, and gives more strength to resist sickness.
4. Exercise will do for your body what intellectual training will do for your mind—educate and strengthen it.
5. Plato called a man lame because he exercised the mind while the body was allowed to suffer.

6. A sound body lies at the foundation of all that goes to make life a success. Exercise will help give it.

7. Exercise will help a young man to lead a chaste life.

8. Varied, light and brisk exercises, next to sleep, will rest the tired brain better than anything else.

9. Metal will rust if not used, and the body will become diseased if not exercised.

10. A man "too busy" to take care of his health is like a workman too busy to sharpen his tools.—*Glasgow Herald*.—*Maryland Medical Journal*.

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**Summary of Reports from County Superintendents for July, 1892.**

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ALAMANCE—Dr. G. W. Long, Graham. Whooping-cough, measles, mild typhoid fever and intestinal diseases have prevailed. New cottages are nearly completed for the Home.

ALEXANDER—Dr. J. B. Watts, Taylorsville. There have been reported five cases of typhoid fever during the past month. The sanitary condition of the county remains very good. That of the public buildings is about the same as at the last report,

ALLEGHANY—No Board of Health.

ANSON—Dr. E. F. Ashe, Wadesboro. No report.

ASHE—No Board of Health.

BEAUFORT—Dr. S. T. Nicholson, Washington. No report.

BERTIE—No Board of Health.

BLADEN—Dr. N. Robinson, Elizabethtown. No report.

BRUNSWICK—No Board of Health.

BUNCOMBE—Dr. C. E. Hilliard, Asheville. Typhoid fever has prevailed in some parts of the county. The sanitary condition of the public buildings is good.

BURKE—Dr. J. L. Laxton, Morganton. The sanitary condition of the county is fair. There have been reported two cases of whooping-cough, four of typhoid fever, four of subacute gastritis, and a few cases of bowel affections, mostly among children. The sanitary

condition of the public buildings is about the same as at last report. No improvements are being considered.

CABARRUS—No Board of Health.

CALDWELL—Dr. A. A. Kent, Lenoir. Typhoid fever in mild form has prevailed in most parts of the county, thirty cases being reported. Two deaths have resulted. There has been an unusually large amount of sickness. The sanitary condition of the public buildings is fairly good.

CAMDEN—No Board of Health.

CARTERET—Dr. F. M. Arendell, Morehead City. The sanitary condition of the county is good. Measles have occurred. Our public buildings are in good condition; they are old, but comfortable.

CASWELL—Dr. R. H. Williamson, Yanceyville. The sanitary condition of the county is good. There has been an epidemic of hydrophobia among dogs. The sanitary condition of the public buildings is good.

CATAWBA—Dr. G. H. West, Newton. Whooping-cough has prevailed in the central part of the county. There have been reported also twenty-seven cases of typhoid and twenty of typho-malarial fever. Repairs at the jail are now in progress, and will probably be completed by the last of the month. Three new houses are being built at the poor-house, one to be used as a hospital.

CHATHAM—Dr. H. T. Chapin, Pittsboro. No report.

CHEROKEE—Dr. J. F. Abernathy, Murphy. The health of this county is not good. Typhoid fever, flux and bowel diseases generally prevail. There has been no change in the condition of the public buildings. The inmates are healthy. Four deaths from typhoid fever reported.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. Typhoid fever has prevailed in some portions of the county. The sanitary condition of the county is good; also that of the public buildings.

COLUMBUS—Dr. I. Jackson, Whiteville. The sanitary condition of the county, as a whole, I consider good; but I hear of many

cases of a continued form of fever in different sections of the county that generally yields to treatment in ten or fifteen days. There have been reported three cases of whooping-cough, and six of typhoid fever. The sanitary condition of the public buildings is good.

RAVEN—Dr. Leinster Duffy, New Berne. No report.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. Malarial fever has prevailed in some parts of the county, and there have been reported a few cases of whooping-cough. The sanitary condition of the county is good. The sanitary condition of the poor-house is good; but the jail is in an unsafe condition. However, all necessary repairs have been ordered.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. No report.

DAVIE—No Board of Health.

DUPLIN—Dr. J. W. Blount, Kenausville. The sanitary condition of the county is reasonably good. There are some cases of malarial fever over every portion of the county, but not so general as the extreme wet weather in June followed by the very warm weather of July would lead us to expect. The sanitary condition of the public buildings is good. The buildings are well ventilated, and kept in a clean and healthful condition.

DURHAM—Dr. N. M. Johnson, Durham. The healthfulness of the county for July has been about an average for the same period in former years. The sanitary condition of the public buildings is good.

EDGECOMBE—Dr. Donald Williams, Tarboro. Whooping-cough has prevailed in all parts of the county. The sanitary condition of the county and public buildings is very good.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. S. Foster, Louisburg. Whooping cough prevails in several portions of the county. So far as I can learn the health of the county was never better. There have been a few cases of continued fever of a mild type; no sickness of any seriousness. The sanitary

condition of the public buildings is very good. Such improvements as are needed are had on application to the proper authorities.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. There have been reported thirty cases of whooping-cough, and six of typhoid fever. The sanitary condition of the county is fair, and that of the public buildings is unchanged.

GREENE—Dr. E. H. Sugg, Snow Hill. Malarial fever has prevailed in the county, but there has been very little sickness of any kind. The sanitary condition of the county is tolerably good, and that of the public buildings is good.

GUILFORD—Dr. E. R. Michaux, Greensboro. No report.

HALIFAX—No Board of Health.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. H. Way, Waynesville. No report.

HENDERSON—Dr. J. L. Egerton, Hendersonville. The sanitary condition of the county is good. There have been reported two cases of typhoid fever.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. M. W. Hill, Statesville. There have been four cases of typhoid fever reported. The sanitary condition of the county is very good. Have heard of two deaths from typhoid fever. There have also been a few cases of cholera-infantum. The public buildings are in their usual sanitary condition. There have been no cases of sickness at either the jail or the poor-house this season.

[We are very glad to be corrected by Dr. Hill in regard to the report we published last month, that he had two fatal cases of typhoid fever in his own family. The unfortunate family in which these cases occurred lived out of town. His report said "one," while we read it "our" family, etc.]

JACKSON—No Board of Health.

JOHNSTON—Dr. L. L. Sasser, Smithfield. Malarial troubles, continued fever and five cases of typhoid fever have occurred. The sanitary condition of the public buildings is good.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. There has been some malarial fever in different sections, and there have been reported three cases of typhoid fever.

LINCOLN—Dr. W. L. Crouse, Lincolnton. Typhoid fever has prevailed in town and the eastern portion of the county—I have had ten cases in my own practice. The fever broke out just after the heavy rains, and seemed always to be from surface water getting into the springs and wells. There is some dysentery, no malaria. There have been five cases of typhoid fever in the jail. It has seemed to originate from an old cess pool above the well. It was in the form of an old cellar under an old house, not well covered. The jailer died, but no new cases have occurred since the well has been abandoned.

MACON—Dr. J. M. Lyle, Franklin. The sanitary condition of the county is good. Only one case of typhoid fever has been reported. The sanitary condition of the public buildings is also good.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. No report.

MCDOWELL—Dr. J. H. Gilkey, Marion, who has been the Superintendent of Health ever since the organization of the Board of Health in his county, has recently died.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville. An epidemic of summer diarrhea has prevailed in all portions of the county. There have also been several cases of cholera-infantum of a severe type in and around Bakersville, complicated with eclampsia; four deaths have been reported. One case of typhoid fever has been reported. The sanitary condition of the public buildings is good.

MONTGOMERY—Dr. F. E. Asbury, Asbury. The sanitary condition of the county is good—better than for some time. There have been

reported twenty-four cases of whooping-cough and seven of typhoid fever. The poor-house is in good sanitary condition, but the jail is not.

MOORE—Dr. Gilbert McLeod, Carthage. The sanitary condition of the county has been very good this summer. The cases of gastro-intestinal troubles have been milder and fewer in number than usual. There have been reported four cases of typhoid fever. The sanitary condition of the public buildings is good, except the Home, which needs some repairs. The County Commissioners have ordered this done.

NASH—Dr. J. J. Mann, Nashville. The sanitary condition of the county is very good. We are having some whooping-cough now in some portions. The sanitary condition of the public buildings is good.

NEW HANOVER—Dr. F. W. Potter, Wilmington. There have been reported four cases of measles, twenty of whooping-cough, two of diphtheria, fifteen of typhoid fever, and two of pernicious malarial fever. I learn of some continued fevers through the county, attended with inflammation of the tonsils and uvula. The jail has had an average of twenty-one inmates during the month, with little or no sickness. The House of Correction had eight prisoners, two of whom were sick a good deal, one with syphilis and the other with ordinary rheumatism; both are better. The poor-house, or County Home, had sixteen inmates, three of whom are white; one, an old man named James Martin, white, about 65 years of age (I presume), is in a complete demented condition. All I can learn from him is, his name is "James Martin." We found him down in the street, and he was sent out to the poor-house a few weeks since. Mary Martin, a consumptive who keeps her room (in white ward), is furnished her food at her own room from Mrs. Pickett's table nearly all the time. Miss Fannie Morse, on account of her leaving the poor-house and coming to the city, has been confined in the insane department. She has had fever, but is now up again. Most of the evidence obtained by the Grand Jury was from her and another person, an old colored man, Jupiter Lowery, who was crazy a few weeks since,

but is much better now. Miss Morse was sent to the poor-house several months since at the solicitation of her mother, Mrs. Solomon Morse, and her brothers, who said they could not live in the house with her, because she would at times become furiously mad and beat her mother with a broom-stick or anything else she could get in hand, and swore terribly. The old man, Jupiter Lowery, colored, was deranged for a very short time, and is now quite cured. No sickness now of any importance. I am sorry so much has been said, unless the information had been obtained from sane persons. I told every Superintendent before Mrs. Pickett's time, as well as her, never to treat the insane otherwise than very kindly. I never saw a colored person in Miss Martin's room, a white woman, nor in any other white inmate's room. I have never seen the white and colored eat together in the same room or at the same table. I have known Mrs. Pickett to feed the sick from her own table. The white inmates occupy rooms in a separate building from the colored. The place needs draining, and I have begged and importuned Mr. Owen Hausey, white man in charge of affairs, to have ditches dug, etc.; and which, if done properly, would drain the premises, basement and all, perfectly. The last time I made a demand he said it would be done soon after the Commissioners met on the first of the month. I remember well of saying to some of the Commissioners that the contractor would bear watching. He went off without completing the hospital—not a shelf, cupboard, bench or anything in the building. I noticed, too, that there was a closeness about the building, and want of sufficient light. Mr. Bagg said all would be made "O. K." I could say more, but it is useless at present.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. Measles and whooping-cough have prevailed in some sections, and there have been reported twelve cases of typhoid fever and one of pernicious malarial fever. The sanitary condition of the county is fair, and that of the public buildings is good. White-wash and lime are used freely.

ONSLOW—Dr. E. L. Cox, Jacksonville. Continued malarial fevers have prevailed in all parts of the county, and there have been reported

two cases of typhoid fever. There has been an epidemic of hog cholera in the northern part of the county. The sanitary condition of the county and public buildings is good.

ORANGE—Dr. D. C. Parris, Hillsboro. Bowel, throat and pulmonary diseases have prevailed in all portions of the county. The sanitary condition of the county is not very good. There have been reported two cases each of scarlatina, typhoid fever and cholera. The sanitary condition of the public buildings, except the jail, is good.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. S. S. Satchwell, Burgaw. Malarial and typhoid fevers have prevailed to a considerable extent. An epidemic of insanity is prevailing, and has prevailed for many months, among our negro population, especially among the women, and is giving us much concern. We have no suitable accommodations, and our negro asylum at Goldsboro is full to overflowing. What causes so much negro insanity in our State certainly demands inquiry.

PERQUIMANS—No Board of Health.

PERSON—No Board of Health.

PITT—Dr. B. T. Cox, Redalia. Malarial and typhoid fevers and intestinal troubles have prevailed in many parts of the county. Excepting our creeks and rivers, where there has been considerable overflow by the past rains, the sanitary condition of the county is good. The public buildings are nicely kept.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Asheboro. There have been reported four cases of measles, seven of whooping-cough, and nine of typhoid fever. The sanitary condition of the public buildings is good.

RICHMOND—Dr. J. M. Stansill, Rockingham. The health of this section of the county is very good. There have been a few cases of malarial fever, fourteen cases of scarlatina, four of diphtheria, and a few cases of typhoid fever. The sanitary condition of the public buildings is good, except at the poor-house, which needs some changes. .

ROBESON—Dr. R. F. Lewis, Lumberton. Whooping-cough has prevailed in some sections of the county. Cholera has been epidemic among hogs. The sanitary condition of the county is fair; that of the public buildings is good.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Typhoid fever has prevailed in several neighborhoods, and to some extent in Salisbury. The sanitary condition of the county is about as usual—some sections are healthy, while malarial and typhoid fevers prevail in others. The past ten days have been excessively hot, but there have been no serious cases of prostration, though the people have suffered much from the heat. The public buildings are in good sanitary condition.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. The sanitary condition of the county is very good, and the health of the people better than for some time. The condition of the public buildings is unchanged.

SAMSON—Dr. J. A. Stevens, Clinton. No report.

STANLY—Dr. A. C. Boyles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. The sanitary condition of the county is good. There have been reported about forty cases of whooping-cough, one of diphtheria and ten of typhoid fever. The sanitary condition of the public buildings is good.

SURRY—No Board of Health.

SWAIN—No Board of Health.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander, Columbia. No report.

UNION—Dr. W. C. Ramsay, Monroe. Typhoid fever, remittent fever, and whooping-cough have prevailed in some parts of the county. "Typho-malarial," so called, has been spoken of as prevailing to some extent. The sanitary condition of the poor-house is good. There is a new jail now being built, and will soon be completed.

VANCE—Dr. W. T. Cheatham, Henderson. The sanitary condition of the public buildings is good. No information as to the nature of prevailing diseases.

WAKE—Dr. Jas. McKee, Raleigh. The sanitary condition of the county is good. There have been reported one case of scarlatina, two of diphtheria, and thirty-eight of typhoid fever. The sanitary condition of all public buildings is good.

WARREN—Dr. P. J. Macon, Warrenton. No report.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Councill, Boone. There have been reported ten cases of whooping-cough, ten of scarlatina and one of typhoid fever. The sanitary condition of the county is very good, with very little sickness in the county. The public buildings are all in good sanitary condition.

WAYNE—Dr. John Spicer, Goldsboro. The sanitary condition of the county is good. There has been an epidemic of cholera among hogs and chickens. The sanitary condition of the public buildings is good.

WILKES—No Board of Health.

WILSON—Dr. A. Anderson, Wilson. Malarial fevers have prevailed in all parts of the county. The sanitary condition of the county is good.

YADKIN—Dr. T. R. Harding, Yadkinville. Typhoid fever has prevailed in nearly all portions of the county; about thirty-five cases reported. Our county is well drained at present, save one portion, consequently we have very little malaria. As to the precautions for the prevention of typhoid fever, I cannot think our people are up with the age. The sanitary condition of the poor-house is good. We have no jail, but will soon begin to erect one on the best sanitary plans of the times.

VANCEY—Dr. J. L. Ray, Burnsville. The general health of the county is very good, considering the hot weather. There have been reported four cases of typhoid fever. The jail is not very well kept. The poor-house is moderately well kept.

*Review of Diseases for July, 1892.*

**CHICKEN CHOLERA**—Was reported from Wayne.

**CHOLERA**—From Orange.

**CHOLERA-INFANTUM**—From Iredell and Mitchell.

**DIARRHEA**—From Alamance, Burke, Cherokee, Mitchell, Moore and Pitt—6 counties.

**DIPHTHERIA**—From New Hanover, Richmond, Stokes and Wake—4 counties.

**DYSENTERY**—From Alamance, Burke, Cherokee and Pitt—4 counties.

**FLUX**—From Cherokee.

**GASTRITIS**—From Burke.

**HOG CHOLERA**—From Onslow, Robeson and Wayne—3 counties.

**HYDROPHOBIA (DOGS)**—From Caswell.

**INSANITY**—From Pender.

**MALARIAL FEVER**—From Columbus, Cumberland, Duplin, Franklin, Greene, Johnston, Lenoir, New Hanover, Onslow, Pender, Pitt, Richmond, Rowan, Union and Wilson—15 counties.

**MALARIAL FEVER, PERNICIOUS**—From New Hanover and Northampton.

**MEASLES**—From Alamance, Carteret, New Hanover, Northampton and Randolph—5 counties.

**SCARLATINA**—From Orange, Richmond, Wake and Watauga—4 counties.

**TYPHOID FEVER**—From Alamance, Alexander, Buncombe, Burke, Caldwell, Catawba, Cherokee, Cleveland, Columbus, Granville, Henderson, Iredell, Johnston, Lenoir, Lincoln,

Macon, Mitchell, Montgomery, Moore, New Hanover, Northampton, Onslow, Orange, Pender, Pitt, Randolph, Richmond, Rowan, Stokes, Union, Wake, Watauga, Yadkin and Yancey—34 counties.

**TYPHO-MALARIAL**—From Catawba and Union.

**WHOOPING-COUGH**—From Alamance, Burke, Catawba, Cumberland, Columbus, Edgecombe, Franklin, Granville, Montgomery, Nash, Northampton, Randolph, Robeson, Stokes, Union and Watauga—16 counties.

*Summary of Mortuary Reports for July, 1892.*

## (NINETEEN TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population.	61,200	50,700	111,900
Aggregate deaths ....	103	153	256
Annual death-rate per 1,000 represented.	20.2	36.2	27.4
Deaths under 5 years of age,			130

*Causes of death.*

Typhoid fever.....	11	13	24
Malarial fever.....	3	3	6
Diphtheria .....	1	0	1
Whooping-cough .....	3	1	4
Pneumonia .....	2	4	6
Consumption .....	9	11	20
Brain diseases .....	6	5	11
Heart diseases.....	3	6	9
Neurotic diseases....	2	0	2
Diarrhoeal diseases...	25	40	65
All other diseases....	27	50	77
Accident .....	0	4	4
Still-born.....	11	16	27
	103	153	256

*Condition of Jails and Poor-houses by Counties for July, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Alamance.....	5 (a) .....	.....	.....	.....	34	.....	.....	.....
Alexander.....	1	500	.....	1	10	550	.....	3
Alleghany.....	.....	.....	.....	.....	.....	.....	.....	.....
Anson.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashe.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaufort.....	.....	.....	.....	.....	.....	.....	.....	.....
Bertie.....	.....	.....	.....	.....	.....	.....	.....	.....
Bladen.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick.....	.....	.....	.....	.....	.....	.....	.....	.....
Buncombe.....	22	.....	.....	.....	49 (b) .....	.....	.....	.....
Burke.....	4	.....	.....	2	8	.....	.....	3
Cabarrus.....	.....	.....	.....	.....	.....	.....	.....	.....
Caldwell.....	0	.....	.....	.....	8	*	3	3
Camden.....	.....	.....	.....	.....	.....	.....	.....	.....
Carteret.....	1	*	0	0	0	.....	.....	.....
Caswell.....	4	500	.....	1	21	1,000	.....	3
Catawba.....	5	.....	1	5	30	.....	7	18
Chatham.....	.....	.....	.....	.....	.....	.....	.....	.....
Cherokee.....	3	.....	.....	.....	2	.....	.....	.....
Chowan.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland.....	4	.....	.....	2	22	997	.....	4
Columbus.....	14	*	.....	6	11	*	.....	0
Craven.....	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland.....	4	.....	.....	.....	16	.....	.....	.....
Currituck.....	.....	.....	.....	.....	.....	.....	.....	.....
Dare.....	.....	.....	.....	.....	.....	.....	.....	.....
Davidson.....	.....	.....	.....	.....	.....	.....	.....	.....
Davie.....	.....	.....	.....	.....	.....	.....	.....	.....
Duplin.....	0	.....	.....	.....	8	.....	.....	.....
Durham.....	9	.....	.....	.....	31 (c) .....	.....	.....	.....
Edgecombe.....	17	975	6	5	20	*	5	4
Forsyth.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Space exceeds one thousand cubic feet. (a) Includes 4 in house of correction. (b) Includes 30 in house of correction. (c) Includes 15 in house of correction.

*Condition of Jails and Poor-houses by Counties for July, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	9	.....	.....	.....	21	.....	.....	.....
Gaston.....	.....	.....	.....	.....	.....	.....	.....	.....
Gates.....	.....	.....	.....	.....	.....	.....	.....	.....
Graham .....	.....	.....	.....	.....	.....	.....	.....	.....
Granville.....	2	*	.....	.....	37 (a)	*	13	9
Greene.....	.....	.....	.....	.....	10	1,000	.....	1
Guilford.....	.....	.....	.....	.....	.....	.....	.....	.....
Halifax.....	.....	.....	.....	.....	.....	.....	.....	.....
Harnett.....	.....	.....	.....	.....	.....	.....	.....	.....
Haywood.....	.....	.....	.....	.....	.....	.....	.....	.....
Henderson .....	5	.....	.....	.....	2	.....	.....	.....
Hertford.....	.....	.....	.....	.....	.....	.....	.....	.....
Hyde.....	.....	.....	.....	.....	.....	.....	.....	.....
Iredell.....	6	.....	.....	.....	23	.....	.....	.....
Jackson.....	.....	.....	.....	.....	.....	.....	.....	.....
Johnston .....	7	*	4	5	13	1,000	5	3
Jones.....	.....	.....	.....	.....	.....	.....	.....	.....
Lenoir.....	.....	.....	.....	.....	.....	.....	.....	.....
Lincoln.....	8	1,000	.....	4	23	350	.....	.....
McDowell.....	.....	.....	.....	.....	.....	.....	.....	.....
Macon.....	0	.....	.....	.....	0	.....	.....	.....
Madison.....	.....	.....	.....	.....	.....	.....	.....	.....
Martin.....	.....	.....	.....	.....	.....	.....	.....	.....
Mecklenburg.....	.....	.....	.....	.....	.....	.....	.....	.....
Mitchell.....	2	.....	.....	.....	5	.....	.....	.....
Montgomery.....	6	.....	.....	.....	16	.....	.....	.....
Moore.....	10	960	0	2	10	850	1	4
Nash.....	2	600	.....	.....	23	1,000	3	5
New Hanover.....	21	600	13	12	24 (b)	1,000	16	15
Northampton.....	10	1,000	4	2	43	*	20	8
Onslow .....	1	*	0	0	3	*	1	1
Orange.....	7	700	1	1	21	*	10	4
Pamlico .....	.....	.....	.....	.....	.....	.....	.....	.....

\* Space exceeds one thousand cubic feet. (a) Includes 12 in house of correction. (b) Includes 8 in house of correction.

*Condition of Jails and Poor-houses by Counties for July, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....	7				4			
Perquimans.....								
Person.....								
Pitt.....					20			
Polk.....								
Randolph.....	6				27			
Richmond.....	14		5	7	7		1	0
Robeson.....	5	*			10	720		
Rockingham.....								
Rowan.....	17	485	7	13	16	*	2	2
Rutherford.....	4	700			23	*		
Sampson.....								
Stanly.....								
Stokes.....	5	590	1	1	18	400	4	5
Surry.....								
Swain.....								
Transylvania.....								
Tyrrell.....								
Union.....	12	*			15	*		2
Vance.....	6	*			13	*		
Wake.....	13	*			109 (a)			
Warren.....								
Washington.....								
Watauga.....	4				7			
Wayne.....	12	952		3	5	*		0
Wilkes.....								
Wilson.....	2	*	0	0	18	*		
Yadkin.....	0				21		0	7
Yancey.....	3	768	0	1	1			

\* Space exceeds one thousand cubic feet. (a) Includes 11 in house of correction.

*Mortuary Report for July, 1892.*

TOWNS AND REPORTERS.	RACES.	POPULA- TION.	REPRE- SENTING ANNUAL DEATH RATE PER 1,000.		Typhoid Fever.	Scarlet Fever.	Malaria Fever.	Diphtheria.	Whooping-Cough.	Measles.	Pneumonia.	Consumption.	Brain Diseases.	Heart Diseases.	Neuritic Diseases.	Diarrhetic Diseases.	All Other Diseases.	Accident and Violence.	Suicide.	TOTAL DEATHS.	
			By Races.	Total.																By Towns.	Deaths under 5 years.
Asheville Dr. C. E. Hilliard.	White. Colored.	7,500 3,000	10,500	11.2 36.0	18.3	1						2		4			1	7	9	16	8
Scotland Neck J. D. Perry.	White. Colored.	500 500	1,000	0.0 24.0	12.0										1				0	1	1
Durham Dr. N. M. Johnson.	White. Colored.	4,500 3,500	8,000	16.0 17.1	16.5							1		3			2	6	5	11	4
Fayetteville Dr. J. H. Marsh.	White. Colored.	2,800 2,200	5,000	12.8 32.7	21.6							1		1			1	3	6	9	6
Goldsboro The Mayor.	White. Colored.	2,800 2,200	5,000	21.5 21.8	21.6		2					1		1	1		1	5	4	9	4
Henderson Dr. A. Cheatham.	White. Colored.	2,256 2,000	4,256	0.6 42.0	19.7	1								5	1			0	7	5	
Rocky Mount Dr. G. L. Wimberly.	White. Colored.	800 400	1,200	0.0 30.0	10.0							1						0	1	0	
Oxford Dr. P. Booth.	White. Colored.	1,706 1,600	3,300	7.0 45.0	25.4		1					1		4			1	1	6	7	4
Raleigh Dr. Jas. McKee.	White. Colored.	8,000 7,000	15,000	37.5 37.7	37.6	6						1	2	1	4	7		4	25	5	22
Salisbury Dr. J. J. Summerell.	White. Colored.	2,850 1,650	4,500	16.9 21.8	18.6	1								3	1			4	7	5	
Tarboro Dr. D. Williams.	White. Colored.	1,100 900	2,000	32.7 13.3	24.0							1	1	1	1			3	4	2	
Weldon The Mayor.	White. Colored.	685 750	1,435	0.0 64.0	33.4							1		1	1		2	4	0	4	1
Wilmington Dr. F. W. Potter.	White. Colored.	9,000 12,000	21,000	30.7 21.0	25.1	2	1	1				1	2	1	11	11	1	23	21	44	27
Rockingham Dr. J. M. Stancill.	White. Colored.	1,000 700	1,700	12.0 0.0	7.1									1				1	0	1	1
Statesville Dr. M. W. Hill.	White. Colored.	2,000 500	2,500	18.0 0.0	14.4									3				3	0	3	3
Wilson Dr. A. Anderson.	White. Colored.	2,000 1,500	3,500	21.0 40.0	30.8							1		2	1	5		4	9	2	
Hillsboro Dr. D. C. Parris.	White. Colored.	600 400	1,000	0.0 90.0	35.0									2				0	3	3	
Winston Dr. R. F. Gray.	White. Colored.	5,100 4,900	10,000	11.7 90.6	50.1	1						1	2	1	1	10	3	37	5	42	17
Charlotte City Clerk.	White. Colored.	6,000 5,000	11,000	26.0 43.2	33.8	2		3				1	2	1	3	2	1	13	18	31	17

**Meteorological Summary for North Carolina, July, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTY, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										NO. OF DAYS					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.	Total Precipitation.	(Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.
Asheville.....	71.3	80	26	80.5	52	2	62.1	37	18.4	79.5	4.93	14	11	6	16	S. W.
Bakersville .....	71.3	92	27	82.6	49	8	60.0	43	22.6	.....	6.01	11	6	14	14	W.
Charlotte.....	76.6	97	28	85.5	58	8	68.0	39	17.5	.....	5.89	12	9	10	14	S. W.
Chapel Hill.....	78.9	103	25	91.7	52	8	66.1	51	25.6	.....	3.72	.....	.....	.....	14	.....
Douglas .....	77.4	101	27	91.4	58	17	63.3	43	28.1	.....	2.40	11	16	4	5	S.
Boone .....	71.4	88	22	79.8	60	29	63.1	28	16.7	.....	2.62	.....	.....	.....	2	.....
Columbus.....	67.4	82	23	73.6	50	6	61.3	32	12.3	81.3	4.72	9	11	8	16	N.
Kitty Hawk.....	75.4	95	27	82.5	58	9	69.0	37	13.5	.....	6.46	8	18	5	18	S. W.
Littleton .....	76.5	100	27	89.0	51	9	61.0	49	25.0	.....	6.45	15	4	9	11	.....
Newbern.....	77.1	97	28	86.6	56	9	67.7	41	18.9	.....	7.56	.....	.....	.....	16	.....
Lenoir.....	72.9	90	27	79.0	58	9	68.2	32	10.8	.....	4.90	.....	.....	.....	13	.....
Morganton.....	74.9	94	26	82.5	57	6	70.3	37	12.2	80.0	5.12	.....	.....	.....	15	.....
Mount Airy.....	75.2	94	26	83.1	48	9	64.3	46	21.8	.....	4.67	12	9	10	9	S. W.
Oak Ridge.....	75.1	96	27	84.8	53	9	65.4	43	19.4	.....	4.94	13	10	8	13	S. W.
Pittsboro .....	76.1	95	28	83.8	50	9	68.4	45	15.4	.....	4.30	12	12	7	11	S. W.
Raleigh .....	76.8	98	28	85.7	54	8	67.8	44	17.9	79.2	4.18	11	7	13	13	S.
Southport .....	77.1	87	28	82.1	61	8	72.1	26	10.0	.....	6.31	13	11	7	11	S. W.
Southern Pines .....	77.2	103	28	90.5	50	8	63.8	53	26.7	.....	10.83	19	5	7	11	S. W.
Salisbury .....	79.0	96	27	84.8	60	6	73.1	36	11.7	.....	4.72	.....	.....	.....	12	.....
Weldon .....	77.6	98	30	87.2	52	9	67.9	46	19.3	.....	7.16	13	7	11	16	S.
Tarboro.....	78.2	102	29	88.4	50	9	68.0	50	20.4	.....	4.66	11	12	8	13	.....
Wilmington..	78.0	96	28	85.0	60	8	71.2	36	13.8	85.0	10.26	5	20	6	14	S. W.

## STATE METEOROLOGICAL SUMMARY FOR JULY, 1892.

Mean Barometer 30.12 inches; normal for July, 30.02.

Highest Barometer 30.49 inches, on the 7th, at Lynchburg.

Lowest Barometer 29.89 inches, on the 14th, at Kitty Hawk.

Mean temperature 76.9 degrees; normal for July, 77.8 degrees.

Highest temperature 103, on the 25th, at Chapel Hill and on 28th at Southern Pines.

Lowest temperature 48, on the 9th, at Mt. Airy.

Average rain-fall, 5.74 inches; normal for July, 5.44.

Greatest monthly rain-fall, 13.29 inches, at Cheraw, S. C.

Least monthly rain-fall, 2.41 inches, at Douglas.

Average number of cloudless days, 11.

Average number of partly cloudy days, 12.

Average number of cloudy days, 8.

Average number of rainy days, 13.

Prevailing wind direction, south-west; average hourly velocity, 6.9 miles. Prevailing direction from many years' observations, south-west. Average velocity, 6.7 miles per hour.







# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

*Published Monthly at the Office of the Secretary of the Board, at Raleigh, N. C.*

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SEPTEMBER, 1892.

NO. 6.

IN the August issue of the BULLETIN a slip was inserted announcing the action of the Board at a called meeting held August 7, in regard to the vacancies caused by the death of Dr. Thomas F. Wood. Dr. Geo. Gillett Thomas, of Wilmington, was elected as the new member of the Board, and Dr. Richard H. Lewis, of Raleigh, for several years a member of the Board, was elected as Secretary. The change required a removal of the affairs of the Board from Wilmington to Raleigh, and to avoid interference with the routine work, the new Secretary thought it advisable that the work be continued in Wilmington until the 1st of October, thus giving him time to remove the effects of the Board and prepare himself for the work.

All correspondents of the Board will please take notice that, from this date, all communications should be addressed to Raleigh.

THE epidemic of Asiatic Cholera, which has almost reached the point of a pandemic, is still raging in Hamburg, and to a less extent in several other European cities, though the number of cases and deaths reported in the press dispatches show that the disease is on the wane.

The wave has traveled across the Atlantic, and is striving to gain an entrance into this country, upwards of twenty great steamships with thousands of immigrants coming from infected ports having been detained at the New York Quarantine. Thanks, however, to the great energy and efficiency of the Quarantine officers of that port, the wave has struck a firm barrier, and while a few isolated cases of true Asiatic Cholera have occurred in the city of New York, there has been no spread of the disease, the Board of Health having isolated each case and, by thorough disinfection of the buildings in which the cases occurred, and the burning of the beds and clothing of the victims, checked the disease in each instance.

The success attending the efforts of the Quarantine Board to keep the disease out of our chief metropolis, and the success of the Board of Health in preventing the spread of the disease from the few cases that did find their way into the city, give unquestionable evidence of the wisdom of those States which have established these institutions and endowed them with the *means and the power* to deal with such emergencies as they arise.

*Summary of Reports from County Superintendents for August, 1892.*

**ALAMANCE**—Dr. G. W. Long, Graham. The trouble in our new town is to get the proper attention to privies, and to know how to dispose of kitchen refuse and garbage the most practical and cheapest way. The pig pen is still a nuisance, but not as much so as before the organization of our Board. There is a limited amount of sickness— whooping-cough and an occasional case of malarial fever.

**ALEXANDER**—Dr. J. B. Watts, Taylorsville. There have been reported one case of diphtheria and several of typhoid fever during the past month. The sanitary condition of the county is very good. That of the public buildings is tolerably good.

**ALLEGHANY**—No Board of Health.

**ANSON**—Dr. E. F. Ashe, Wadesboro. No report.

**ASHE**—No Board of Health.

**BEAUFORT**—Dr. S. T. Nicholson, Washington. No report.

**BERTIE**—No Board of Health.

**BLADEN**—Dr. N. Robinson, Elizabethtown. No report.

**BRUNSWICK**—No Board of Health.

**BUNCOMBE**—Dr. C. E. Hilliard, Asheville. No report.

**BURKE**—Dr. J. L. Laxton, Morganton. The sanitary condition of the county is about the same as at the last report. There have been reported ten cases of typhoid fever. No other diseases reported for the month.

**CABARRUS**—No Board of Health.

**CALDWELL**—Dr. A. A. Kent, Lenoir. Typhoid fever in mild form has prevailed in all parts of the county—fifteen cases reported. Coughs and colds have also prevailed in all parts, but the sickness generally has been of a mild type, only one death being reported. The sanitary condition of the public buildings is fairly good.

**CAMDEN**—No Board of Health.

**CARTERET**—Dr. M. F. Arendell, Morehead City. No report.

**CASWELL**—Dr. R. H. Williamson, Yanceyville. There has been little or no sickness in the county so far as heard from. The sanitary condition of the county is good; also that of the public buildings.

**CATAWBA**—Dr. G. H. West, Newton. There have been four cases of whooping-cough and seven of typhoid fever reported. So far as I can learn, the county is in a fair sanitary condition. The sewerage at the jail is now completed, and the prisoners are occupying the new part of the building.

**CHATHAM**—Dr. H. T. Chapin, Pittsboro. No report.

**CHEROKEE**—Dr. J. F. Abernathy, Murphy. No report.

**CHOWAN**—No Board of Health.

**CLAY**—No Board of Health.

**CLEVELAND**—Dr. O. P. Gardner, Shelby. Typhoid fever has prevailed in some portions of the county. No contagious disease of any kind among animals. General health of the county good.

**COLUMBUS**—Dr. Isaac Jackson, Whiteville. The sanitary condition of the county is very good. Malarial fevers have prevailed in some sections to a limited extent. The sanitary condition of the public buildings is very good.

**CRAVEN**—Dr. Leinster Duffy, Newbern. No report.

**CUMBERLAND**—Dr. J. H. Marsh, Fayetteville. The sanitary condition of the county is very good. Also that of the public buildings.

**CURRITUCK**—No Board of Health.

**DARE**—No Board of Health.

**DAVIDSON**—Dr. R. L. Payne, Jr., Lexington. No report.

**DAVIE**—No Board of Health.

**DUPLIN**—Dr. J. W. Blount, Kenansville. The sanitary condition of the county is good. There has been less sickness during the month of August than I have ever known. Hog cholera is prevailing in several sections and is very severe. The sanitary condition of the public buildings is fairly good. There have been great improvements in that direction within the past twelve months. I have gotten

the authorities to consider and act more than hitherto.

DURHAM—Dr. N. M. Johnson, Durham. The sanitary condition of the county is good; as also that of the public buildings.

EDGECOMBE—Dr. Donald Williams, Tarboro. Whooping-cough has prevailed in all sections of the county. The sanitary condition of the county is very good. There has been very little sickness during the month. The public buildings are clean and well kept.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. S. Foster, Louisburg. Whooping-cough prevailed in many sections. With this exception, and the exception of a few cases of typhoid fever (or, as it is called here, "simple continued fever"), there has been very little sickness. The sanitary condition of the public buildings is splendid, to judge by the effects. I have been the Superintendent of Health for the county ever since the establishment of the Board of Health, and during that time there has been only one case of serious sickness in the jail. Of course it is different at the poor-house, as the class of cases is so different.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. There have been reported twenty cases of whooping-cough and two of typhoid fever. There have been no special diseases prevailing during the month. The sanitary condition of the public buildings is as good as the buildings will permit. The jail is kept whitewashed and lime is freely used at all the buildings.

GREENE—Dr. E. H. Sugg, Snow Hill. Chicken-pox has prevailed in the county, with a few cases of scabies and malarial fever. The sanitary condition of the county is tolerably good. That of the public buildings is also good.

GUILFORD—Dr. E. R. Michaux, Greensboro. No report.

HALIFAX—No Board of Health.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. H. Way, Waynesville. No report.

HENDERSON—Dr. J. L. Egerton, Hendersonville. Whooping-cough has prevailed in some parts of the county, ten cases being reported. Four cases of typhoid fever reported. Sanitary condition of the county good. That of the public buildings is good.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. M. W. Hill, Statesville. The condition of the county from a sanitary standpoint is very good indeed. There has been no general sickness. There have been reported some malarial and typhoid fever, tonsillitis and catarhal troubles. There has arisen nothing noteworthy in regard to the sanitary condition of the public buildings.

JACKSON—No Board of Health.

JOHNSTON—Dr. R. J. Noble, Smithfield. The sanitary condition of the county is good. It is very healthy in this county. We have a few cases of bilious fever, and there have been reported two cases of typhoid.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. There has been some remittent fever in town and in the country. The jail has no inmates, and the county no poor-house or house of correction.

LINCOLN—Dr. W. L. Crouse, Lincolnton. Typhoid fever has prevailed in all parts of the county to some extent, and there have also been a few cases of whooping-cough. The sanitary condition of the county is better than for several months—but few new cases of fever anywhere in the county. Our jail has been a nest of typhoid fever, supposed to be caused by drinking water from an infected well. One case at the poor-house was brought there sick. No new cases since the water has been changed.

MACON—Dr. J. M. Lyle, Franklin. No report.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. No report.

MCDOWELL—Dr. B. A. Cheek, Marion. No report.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville.  
No report.

MONTGOMERY—Dr. F. E. Asbury, Asbury. The sanitary condition of the county is good. There have been reported five cases of measles, thirty of whooping-cough, three of typhoid fever, and two of pernicious malarial fever. No efforts at improvement around the jail as yet. The sanitary condition of the poor-house is good.

MOORE—Dr. Gilbert McLeod, Carthage. The sanitary condition of the county is very good. There is very little sickness in the county. Our court-house and the jail are in good sanitaiy condition. New buildings are needed at the Home.

NASH—Dr. J. J. Mann, Nashville. No report.

NEW HANOVER—Dr. F. W. Potter, Wilmington. Diarrheal diseases have prevailed in nearly all parts of the county. There has been very little sickness besides this, as far as I can learn. Some malarial fever has prevailed, but has subsided, or nearly so. There have been reported two cases of measles, two of whooping-cough, one of scarlatina, one of diphtheria, twelve of typhoid fever, one of pernicious malarial fever, and two of haemorrhagic malarial fever. The sanitary condition of the jail is good, except that the floors need repairing. The poor-house is a new brick building. At one time the premises were badly drained; now the drain-pipes leading around the buildings have been cleaned out, and the drainage is much better. Very little sickness. No sickness at House of Correction; building "O. K."

NORTHAMPTON—Dr. H. W. Lewis, Jackson. No report.

ONSLOW—No Board of Health.

ORANGE—Dr. D. C. Parris, Hillsboro. No report,

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. S. S. Satchwell, Burgaw. The sanitary condition of the county is not good. The town of Burgaw is not in a healthy condition. The prevailing diseases are malarial

and typhoid fevers, some of the cases being severe. The people are hard to educate to the importance of such sanitary and preventive measures as will prevent and remove causes of disease, especially as may prevent the accession and spread of epidemics.

PERQUIMANS—No Board of Health.

PITT—Dr. B. T. Cox, Redallia. No Board of Health.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Asheboro. There have been reported twenty-three cases of whooping-cough and twelve of typhoid fever. These have prevailed in all sections of the County. There has been an epidemic of cholera among hogs and chickens. From official reports the sanitary condition of the County is good. The sanitary condition of the poor-house was good at the time of my last visit thereto. That of the jail is excellent. Official reports show five deaths from typhoid fever during the month of August.

RICHMOND—Dr. J. M. Covington, Rockingham. The sanitary condition of this section of the county is good. There is very little sickness of any kind. There have been reported one case each of whooplng-cough, scarlatina and diphtheria, and four of typid fever. The sanitary condition of the public buildings is good, except the poor-house, which needs improvement badly.

ROBESON—Dr. R. F. Lewis, Lumberton. Little sickness has prevailed in any part of the county. Whooping-cough has occurred. There has been an epidemic of hog cholera. The sanitary condition of the county is good; that of the public buildings is fair.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Typhoid fever, with some malarial fever, has prevailed in many sections of the county. One case of diphtheria was reported. The sanitary condition of the County seems to be good. The public buildings are in a fair condition; no improvements lately. The jail remains as it was when first built, except it is warmed by a furnace, and the water-works have been introduced, with proper sewerage to carry off the excrement, etc.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. A few cases of typhoid fever have been reported. The sanitary condition of the county seems to be good; that of the public buildings is as good as the quality of the buildings will permit.

SAMPSON—Dr. J. A. Stevens, Clinton. The sanitary condition of the county is fairly good. Measles, whooping-cough, typhoid and malarial fevers are the prevalent diseases. There is more typhoid fever than I have ever known at one time in the county. The sanitary condition of the poor-house is very good. The jail and the yard around it has had a thorough cleaning, which greatly improves them.

STANLY—Dr. A. C. Boyles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. There have been reported thirty-five cases of whooping cough and twenty-seven of diphtheria. The sanitary condition of the county is good; also that of the public buildings.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. The sanitary condition of the county is better than for several years; only a few cases of gastric fever to report. The sanitary condition of the public buildings is fairly good.

TRANSYLVANIA—No Board of Health.

TYRELL—Dr. Ab. Alexander, Columbia. No report.

UNION—Dr. W. D. Pemberton, Monroe. Whooping-cough is subsiding; some malarial fever yet. One case of scarlet fever and one of diphtheria reported. No new cases. One case of measles and several of tonsillitis and coryza.

VANCE—Dr. A. Cheatham, Henderson. The sanitary condition of the public buildings is good.

WAKE—Dr. Jas. McKee, Raleigh. Seven cases of typhoid fever have been reported. Last month's report of the number of cases of typhoid fever was incorrect, and instead of thirty-eight cases it should have been nineteen. The physicians report weekly, and some of the cases were reported four times. The sanitary condition of the public buildings is good.

WARREN—Dr. P. J. Macon, Warrenton. No report.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Councill, Boone. Scarletina has prevailed in all parts of the county, fifty cases being reported. There have also been reported two cases of typhoid fever. The sanitary condition of the county is good in every way. The scarlatina has prevailed mostly among young children, and has been of very mild type—no deaths. The sanitary condition of both the jail and poor-house is good. Both houses are new, modern and well kept.

WAYNE—Dr. John Spicer, Goldsboro. There have been a few cases of whooping-cough. Cholera among hogs has been epidemic in some parts of the county. The sanitary condition of the County is good. There are a good many cases of continued fever, also of chills and fever. There has been one case of acute meningitis. The sanitary condition of the public buildings is good.

WILKES—No Board of Health.

WILSON—Dr. Albert Anderson, Wilson. There have been a few cases of whooping-cough and five or six of typhoid fever. The sanitary condition of the county is good, also that of all public buildings.

YADKIN—Dr. T. R. Harding, Yadkinville. No report.

YANCEY—Dr. J.-L. Ray, Burnsville. There have been reported five cases of typhoid fever. The sanitary condition of the county is moderately good. The poor-house is very well kept, but the jail is not.

#### *Review of Diseases for August, 1892.*

BILIUS FEVER was reported from Johnston.

CHICKEN-CHOLERA—From Randolph.

CHICKEN-POX—From Greene.

COLDS—From Caldwell and Union.

DIARRHOAL DISEASES—From New Hanover.

DIPHTHERIA—From Alexander, New Hanover, Richmond, Rowan, Stokes† and Union—6 counties.

GASTRIC FEVER—From Swain.

HOG-CHOLERA—From Duplin\*, Randolph, Robeson and Wayne—4 counties.

MALARIAL FEVER—From Alamance, Columbus, Greene, Iredell, Lenoir, New Hanover, Pender, Sampson, Union and Wayne—10 counties.

MALARIAL FEVER, HEMORRHAGIC—From New Hanover.

MALARIAL FEVER, PERNICIOUS—From Montgomery and New Hanover.

MEASLES—From Montgomery, New Hanover, Sampson and Union—4 counties.

MENINGITIS—From Wayne.

SCABIES—From Greene.

SCARLATINA—From New Hanover, Richmond, Union and Watauga†—4 counties.

TONSILLITIS—From Iredell and Union.

TYPHOID FEVER—From Alexander, Burke, Caldwell, Catawba, Cleveland, Franklin, Granville, Henderson, Iredell, Johnston, Lincoln, Montgomery, New Hanover, Pender, Randolph, Richmond, Rowan, Rutheford, Sampson‡, Wake, Watauga, Wilson and Yancey—23 counties.

WHOOPING-COUGH—From Catawba, Edgecombe, Franklin, Granville, Henderson, Lincoln, Montgomery, New Honover, Randolph,

Richmond, Robeson, Sampson, Stokes, Union Wayne and Wilson—16 counties.

†Numerous. \*Severe.

*Summary of Mortuary Reports for August, 1892.*

(SIXTEEN TOWNS.)

	White.	Col'd.	Total.
Aggregate population.	43,300	38,800	\$2,100
Aggregate deaths.....	70	77	147
Annual death-rate per 1,000 represented,	19 4	23 8	21 5
Deaths under 5 years of age,			61

*Causes of death.*

Typhoid fever.....	10	9	19
Malarial fever.....	1	6	7
Whooping-cough ....	2	1	3
Pneumonia .....	1	0	1
Consumption .....	5	7	12
Brain diseases.....	3	2	5
Heart diseases.....	5	4	9
Neurotic diseases....	0	2	2
Diarrhoeal diseases... .	13	14	27
All other diseases....	25	24	49
Accident .....	0	2	2
Still-born.....	5	6	11
	70	77	147

*Condition of Jails and Poor-houses by Counties for August, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined,	Space allotted each, (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in,	Space allotted each, (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....	5 (a).....	.....	.....	.....	28.....	.....	.....	.....
Alexander.....	1.....	500.....	.....	1.....	16.....	550.....	.....	2.....
Alleghany.....	.....	.....	.....	.....	.....	.....	.....	.....
Anson.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashe.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaufort.....	.....	.....	.....	.....	.....	.....	.....	.....
Bertie.....	.....	.....	.....	.....	.....	.....	.....	.....
Bladen.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick.....	.....	.....	.....	.....	.....	.....	.....	.....
Buncombe.....	.....	.....	.....	.....	.....	.....	.....	.....
Burke.....	4.....	650.....	.....	.....	6.....	800.....	.....	.....
Cabarrus.....	.....	.....	.....	.....	.....	.....	.....	.....
Caldwell.....	0.....	.....	.....	.....	9.....	*	4.....	3.....
Camden.....	.....	.....	.....	.....	.....	.....	.....	.....
Carteret.....	.....	.....	.....	.....	.....	.....	.....	.....
Caswell.....	3.....	500.....	.....	.....	20.....	1,000.....	7.....	2.....
Catawba.....	6.....	.....	3.....	4.....	28.....	.....	5.....	12.....
Chatham.....	.....	.....	.....	.....	.....	.....	.....	.....
Cherokee.....	.....	.....	.....	.....	.....	.....	.....	.....
Chowan.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland.....	14.....	.....	.....	6.....	18.....	.....	.....	4.....
Columbus.....	9.....	*	.....	6.....	10.....	*	.....	0.....
Craven.....	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland.....	6.....	.....	.....	.....	13.....	.....	.....	.....
Currituck.....	.....	.....	.....	.....	.....	.....	.....	.....
Dare.....	.....	.....	.....	.....	.....	.....	.....	.....
Davidson.....	.....	.....	.....	.....	.....	.....	.....	.....
Davie.....	.....	.....	.....	.....	.....	.....	.....	.....
Duplin.....	1.....	.....	.....	.....	8.....	*	.....	.....
Durham.....	11.....	.....	.....	.....	32 (b).....	.....	.....	.....
Edgecombe.....	11.....	*	3.....	4.....	20.....	*	6.....	5.....
Forsyth.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Space exceeds one thousand cubic feet. (a) Includes 4 in house of correction. (b) Includes 15 in house of correction.

*Condition of Jails and Poor-houses by Counties for August, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	10			2	20			2
Gaston.....								
Gates.....								
Graham .....								
Granville.....	3	*	0	0	33 (a)	*	14	12
Greene.....					10	1,000		1
Guilford.....								
Halifax.....								
Harnett.....								
Haywood.....								
Henderson .....	5				2			
Hertford.....								
Hyde.....								
Iredell.....	10				24			
Jackson.....								
Johnston .....	1	800			12	*		
Jones.....								
Lenoir.....								
Lincoln .....	7	1,000			23	400		
McDowell.....								
Macon.....								
Madison .....								
Martin.....								
Mecklenburg.....								
Mitchell.....								
Montgomery.....	6				15			
Moore.....	5	*	0	0	7	*	1	3
Nash .....								
New Hanover.....	15	600	10	6	22 (b)	900	14	14
Northampton.....								
Onslow .....								
Orange.....								
Pamlico .....								

\* Space exceeds one thousand cubic feet. (a) Includes 4 in house of correction. (b) Includes 5 in house of correction.

*Condition of Jails and Poor-houses by Counties for August, 1892.—Continued.*

COUNTIES.	JAIL.					POOR-HOUSE.				
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.		
Pasquotank.....										
Pender.....	9	.....			4	.....				
Perquimans.....										
Person.....										
Pitt.....										
Polk.....										
Randolph.....	8	.....			26	.....				
Richmond.....	20	.....	5	4	11	.....	1	1		
Robeson.....	5	*	.....		9	800	.....			
Rockingham.....										
Rowan.....	10	750	3	6	15	*	1	1		
Rutherford.....	5	810	.....		23	*	.....			
Sampson.....	5	.....			18	.....				
Stanly.....										
Stokes.....	10	500	.....	4	18	400	.....	3		
Surry.....										
Swain.....						*				
Transylvania.....										
Tyrrell.....										
Union.....										
Vance.....	7	*	.....		14	*	.....			
Wake.....	18	*	.....		110 (a)	.....				
Warren.....										
Washington.....										
Watauga.....	5	*	3	2	7	*	4	0		
Wayne.....	19	952	.....	4	5	*	.....	0		
Wilkes.....										
Wilson.....	3	*	0	2	18	*	5	5		
Yadkin.....										
Yancey.....	5	576	1	2	1	.....				

\* Space exceeds one thousand cubic feet. (a) Includes 40 in house of correction.

*Mortuary Report for August, 1892.*

**Meteorological Summary for North Carolina, August, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										NO. OF DAYS					Prevailing Wind.
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	
Bakersville .....	71.2	90	8	83.8	49	14	58.5	41	25.3	.....	4.34	18	8	5	11	W.
Charlotte.....	77.8	92	21	88.0	62	14	67.8	30	20.2	.....	2.31	9	14	8	6	N. E.
Chapel Hill.....	82.0	105	10	96.9	60	13	67.1	45	29.8	.....	0.83	.....	.....	.....	6	.....
Douglas .....	77.0	101	22	93.5	50	31	60.6	51	32.9	.....	2.00	25	3	3	2	S. W.
Columbus .....	67.2	82	21	74.8	52	31	60.2	30	14.6	81.1	6.00	8	14	9	13	N.
Horse Cove.....	70.4	81	6	78.4	58	13	62.4	23	16.0	79.5	10.15	9	10	12	14	N. E.
Kitty Hawk.....	79.6	92	11	85.1	69	18	74.1	23	11.0	.....	2.43	10	14	7	15	S. W.
Littleton .....	76.6	96	11	89.9	57	13	63.4	39	26.5	.....	5.42	.....	.....	.....	11	.....
Lexington .....	77.3	96	21	89.1	57	14	65.5	39	23.6	78.5	4.18	18	13	0	7	N.
Lenoir.....	73.1	86	20	81.3	60	13	66.9	26	14.4	.....	2.40	.....	.....	.....	5	.....
Morganton.....	75.8	90	21	85.2	62	13	68.9	28	16.3	79.3	2.02	.....	.....	.....	7	.....
Mount Airy.....	74.0	92	21	86.4	53	14	61.7	39	24.7	.....	6.01	17	8	5	8	S. W.
Oak Ridge.....	76.8	95	10	88.2	56	14	65.3	39	22.9	.....	2.49	17	5	9	9	S. W.
Pittsboro .....	77.2	94	21	87.1	59	20	67.2	35	19.9	.....	0.92	.....	.....	.....	5	S. W.
Raleigh .....	78.7	94	11	88.7	63	14	68.7	31	20.0	77.0	4.42	10	13	8	9	S.
Southport .....	78.2	87	11	84.0	60	20	72.5	27	11.5	.....	1.91	13	13	5	10	S. W.
Southern Pines .....	78.6	101	11	92.8	57	14	64.5	44	28.3	.....	5.05	13	11	7	6	S. W.
Salisbury .....	80.5	91	21	87.2	67	14	73.8	24	13.4	.....	1.61	.....	.....	.....	6	.....
Weldon .....	78.9	96	11	89.6	60	14	68.2	36	21.5	.....	6.59	15	2	14	10	S.
Willeyton .....	77.2	93	21	88.0	55	20	66.4	38	21.6	.....	4.00	8	12	11	8	.....
Wilmington..	79.5	93	11	87.1	66	16	71.9	27	16.2	83.0	4.38	8	17	6	12	S. W.

## STATE METEOROLOGICAL SUMMARY FOR AUGUST, 1892.

Mean Barometer 30.04 inches; normal for August, 30.03.

Highest Barometer 30.20 inches, on the 16th, at Lynchburg.

Lowest Barometer 29.83 inches, on the 25th, at Norfolk.

Mean temperature 77.2 degrees; normal for August, 75.8 degrees.

Highest temperature 105, on the 15th, at Chapel Hill.

Lowest temperature 49, on the 14th, at Bakersville.

Average rain-fall, 3.77 inches; normal for August, 6.09 inches.

Greatest monthly rain-fall, 10.15 inches, at Horse Cove.

Least monthly rain-fall, 0.82 inches, at Chapel Hill.

Average number of cloudless days, 13.

Average number of partly cloudy days, 11.

Average number of cloudy days, 7.

Average number of rainy days, 9.

Prevailing wind direction, south-west; average hourly velocity, 6.0 miles. Prevailing direction from many years' observations, south-west. Average velocity, 6.6 miles per hour.











# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

*Published Monthly at the Office of the Secretary of the Board, at Raleigh, N. C.*

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J. H. TUCKER, M. D., Henderson.	GEO. GILLETT THOMAS, M. D., Wilmington.
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RICHARD H. LEWIS, M. D., *Secretary and Treasurer*, Raleigh.

Entered at the post-office at Raleigh, N. C., as third-class mail matter.

VOL. VII. ~~October~~ NOVEMBER, 1892.

NO. 7.

## *A Word With the County Superintendents of Health.*

One of the duties of the Secretary of the State Board of Health is the preparation for publication by the State of our Monthly Bulletin. It is evident that the fresher the sanitary news it contains the more valuable it is. If anything is to be done, the very fact that it is done promptly adds to its effectiveness. It is also desirable, of course, that when anything is done it should be done as well as possible. We cannot claim that the issue of a bulletin of news that is a month old is a creditable performance, but under the conditions that now obtain we can do no better. Unless the matter is on hand it certainly cannot be published.

My first experience in getting out this number has brought forcibly to my attention certain obstacles to carrying out the above ideas, which all will, I think, admit to be sound; and it is because these obstacles can only be removed by the County Superintendents that I make this appeal. In this connection, in relation to the matter of promptness of publication, I would respectfully call attention to the fact that many Superintendents send in no report

at all (in this issue 22, or more than 33 per cent., have failed altogether to report), and to the further fact that very many have been very dilatory in performing that duty.

The frequent occurrence of "No report" shows an amount of carelessness or indifference that must appear to our readers as very discreditable. It looks so thrifless and "slack twisted," as the old-time folk would say, that we should not longer make such an exhibition of ourselves to other Health Boards and sanitarians generally to whom the Bulletin goes. In section 8 of the Act relating to the Board of Health these words occur: "A failure to report by the tenth of the month for the preceding month shall subject the delinquent to a fine of one dollar for each day of delinquency, and this amount shall be deducted from the salary of the Superintendent by the Board of County Commissioners on authenticated statement of such delinquency by the Secretary of the State Board of Health." Men of spirit can easily understand how repulsive to my feelings it would be to call the attention of the County Commissioners to such delinquencies for the purpose of punishing the delinquent by curtailing his salary, already in most instances

ridiculously meagre. It may be my duty to do so, but I cannot bring myself to it while I believe, as I do, that the gentlemen at fault in this respect are so unintentionally and need only to have the importance of promptness brought plainly before them to insure reformation. My lamented predecessor—the most kind-hearted and long-suffering of men—was in the habit of sending a notice to those who had not reported on the 10th of the month, and waiting until the 20th before making up his "copy." Such a long delay makes it difficult to get the Bulletin in the mail before the end of the month. So, hereafter I shall send a reminder on the 5th of each month and wait until the 10th, the day set by the law. It is doubtless true that the principal cause of delay on the part of a Superintendent in sending in his report is the delay on the part of the individual physicians in sending in their reports to him; but I would request that you impress upon them the importance of promptness, and that you do not wait on them longer than the 5th. I would also beg of you not to fail to send in some kind of a report, no matter how incomplete, that the words "No report" may not appear in our future issues.

Now, gentlemen, will not every one of you show interest enough in this matter of sending in your monthly reports to let me have them immediately on receipt of the notice at the very latest, and sooner, if possible? By so doing you will fulfil a duty required of you by the law under which you hold office, and at the same time forward the health interests of the State.

Do you need blanks for your own reports or for distribution among the physicians of your county? If so, notify me by postal card and I will immediately supply you.

The new Secretary of the State Board does not claim to be the possessor of all sanitary knowledge, and he would therefore thank his associates in the beneficent work of preventing disease—the County Superintendents as well as all other humane physicians who must be interested in it—for any suggestions they may think proper to make. Such suggestions would be gratefully received, carefully considered, and utilized whenever practicable. It

is a grand work we are engaged in, and to make it really effective we must all pull together with a will.

RICHARD H. LEWIS,  
*Secretary.*

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*Summary of Reports from County Superintendents for September, 1892.*

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ALAMANCE—Dr. G. W. Long, Graham. The sanitary condition of public buildings is good except the jail, and that is as good as the building will permit. Malarial fever is reported in sections, whooping-cough and measles to a limited extent. Three cases of diphtheria—no deaths.

ALEXANDER—Dr. J. B. Watts, Taylorsville. There has been very little sickness of any kind during September. One case of diphtheria, and one of typhoid fever reported. The sanitary condition of the county and of the public buildings is very good. There are two rooms being erected at the poor-house for the benefit of the paupers.

ALLEGHANY—No Board of Health.

ANSON—Dr. E. F. Ashe, Wadesboro. No report.

ASHE—No Board of Health.

BEAUFORT—Dr. S. T. Nicholson, Washington. No report.

BERTIE—No Board of Health.

BLADEN—Dr. N. Robinson, Elizabethtown. No report.

BRUNSWICK—No Board of Health.

BUNCOMBE—Dr. C. E. Hilliard, Asheville. Typhoid fever has prevailed, in very mild form, in some portions of the county. The sanitary condition of the county and public buildings is good.

BURKE—Dr. J. L. Laxton, Morganton. The general sanitary condition of the county is good. There were reported three cases of dysentery, one of gastritis, and one of typhoid fever. Very little sickness of any kind in September. Our public buildings are not constructed with a view to good sanitation, but are kept as well and in as good condition as such structures will

admit of. I hear of no efforts at improvement in the near future.

CABARRUS—No Board of Health.

CALDWELL—Dr. A. A. Kent, Lenoir. Typhoid fever continues to prevail in parts of the county. Fifteen cases; two deaths reported from it. There have been a large number of cases of tonsilitis. Six cases of sporadic diphtheria reported—two deaths from it in one family—and three of scarlatina. The prisoners in jail are much crowded, and the sanitary condition bad. No efforts at improvement.

CAMDEN—No Board of Health.

CARKEET—Dr. M. F. Arendell, Morehead City. Measles has prevailed in most portions of the county. The sanitary condition of the county and public buildings is good.

CASWELL—Dr. R. H. Williamson, Yanceyville. A few cases of remittent and typhomalarial fever have been reported. The general sanitary condition of the county and public buildings is good.

CATAWBA—Dr. G. H. West, Newton. Nine cases of typhoid fever reported. The sanitary condition of the county is as good as usual at this season of the year; that of the public buildings is good.

CHATHAM—Dr. H. T. Chapin, Pittsboro. No report.

CHEROKEE—Dr. J. F. Abernathy, Murphy. The health of this county was never better—no sickness. No effort in the direction of improvement of public buildings except the completion of one of the finest court-houses in the South.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. No report.

COLUMBUS—Dr. Isaac Jackson, Whiteville. The general sanitary condition of the county and public buildings is very good. Malarial fever has prevailed to a limited extent in some portions of the county. Three cases of typhoid fever reported. An epidemic of hog cholera in some portions of the county.

RAVEN—Dr. Leinster Duffy, Newbern. No report.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. One case of whooping-cough reported. The sanitary condition of the county and public buildings is good.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Lexington. No report.

DAVIE—No Board of Health.

DUPLIN—Dr. J. W. Blount, Kenansville. One case of diphtheria reported. Typhoid fever has prevailed in some sections. The sanitary condition of the county is good; that of the public buildings good, and better than for several years. There has been an epidemic of hog cholera.

DURHAM—Dr. N. M. Johnson, Durham. Whooping-cough has prevailed to a slight extent. The sanitary condition of county and public buildings is good.

EDGECOMBE—Dr. Donald Williams, Tarboro. Whooping-cough has prevailed in all portions of the county. The sanitary condition of the county is good; the public buildings clean and well kept.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. S. Foster, Louisburg. So far as I can learn there never has been so little sickness. Only a few cases of malarial fever. The sanitary condition of public buildings is good. No cause for complaint.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. Two cases of typhoid fever reported. Sanitary condition of the county is good and there is but little sickness throughout the county. But few physicians report to the superintendent. The sanitary condition of the public buildings unchanged, and no steps to improve. The court-house is completed, and considerably improved, having good ventilation and more room.

GREENE—Dr. E. H. Sugg, Snow Hill. A few cases of typhoid fever reported. Malarial

fever has prevailed in the county. The sanitary condition of the county and public buildings is good.

GUILFORD—Dr. E. Michaux, Greensboro. No report.

HALIFAX—No Board of Health.

HANPETH—No Board of Health.

HAYWOOD—Dr. J. H. Way, Waynesville. The general health and sanitary condition of the county is good. Five cases of typhoid fever reported—all isolated cases. Four have recovered, and the fifth is expected to do so. In this county there is very rarely a death from typhoid fever. Three cases of milk-sickness are said to have existed, but were not seen by a physician. No efforts at improvement of public buildings (jail and home for aged and infirm). The county has a very handsome court-house, built a few years since. In the past two years the county has built five substantial iron bridges across Pidgeon River. Next year we think we will get a new jail. The present one is a miserable affair at best.

HENDERSON—Dr. J. L. Egerton, Hendersonville. Two cases of typhoid fever reported. The sanitary condition of the county is remarkably good.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. M. J. Hill, Statesville. A few cases of typhoid fever reported; some diarrhoea, some malarial fever, and a few cases of tonsilitis. Sanitary condition generally good. Public buildings in very good condition and well kept.

JACKSON—No Board of Health.

JOHNSTON—Dr. R. J. Noble, Smithfield. One case of typhoid fever and one of pernicious malarial fever reported. County is remarkably healthy and has been for some time. Public buildings in good sanitary condition.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. Some bronchitis and mild intermittent fever. Very little sickness. The jail is in good condition, though unoccupied during the past month. We have no poor-house.

LINCOLN—Dr. W. L. Crouse, Lincolnton. A few cases of typhoid fever, but mostly old cases. Little sickness of any kind in the county. Sanitary condition of the public buildings is good.

MACON—Dr. J. M. Lyle, Franklin. No report.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. No report.

MCDOWELL—Dr. B. A. Cheek, Marion. Six cases of typhoid fever reported. The sanitary condition of the public buildings is good and of the county is pretty good. The poor-house has two new frame houses nearly completed, besides three log cabins, which are very comfortable.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville. Three cases of typhoid fever and fifteen of whooping-cough reported; also some cases of bronchitis and pneumonia. Sanitary condition of public buildings good.

MONTGOMERY—Dr. F. E. Asbury, Asbury. Eight cases of measles, fourteen of whooping-cough, ten of diphtheria, thirteen of typhoid fever, and nine of hemorrhagic malarial fever reported. We are having some more influenza of a mild type. The jail is not in very good condition; we need a new house.

MOORE—Dr. Gilbert McLeod, Carthage. The general sanitary condition of the county is good. Whooping-cough has prevailed in Carthage Township. Seven cases of typhoid fever reported in one family due to local causes. No deaths from it. Two cases of erysipelas and several of tonsilitis reported. The home needs new buildings badly, but there is no sickness there at present. The court-house and jail are in good sanitary condition.

NASH—Dr. J. J. Mann, Nashville. Seven cases of whooping-cough and ten of typhoid fever reported. Sanitary condition of the county and public buildings very good.

NEW HANOVER—Dr. F. W. Potter, Wilmington. Four cases of measles, two of whooping-cough, two of diphtheria, nine of typhoid fever, one of pernicious malarial fever

and one of hemorrhagic malarial fever reported. The county is in good sanitary condition, as are the public buildings. There is no sickness of importance in the public institutions. One inmate of the poor-house, who had just been admitted, died of phthisis.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. No report.

ONSLOW—No Board of Health.

ORANGE—Dr. D. C. Parris, Hillsboro. A few cases of whooping-cough, a few cases of pernicious and a few of hemorrhagic malarial fever reported. Some influenza and tonsilitis, generally in mild form. The general sanitary condition of the county is good, as is that of the public buildings, with the exception of the jail, which needs a better plan for the disposal of human excrement.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. S. S. Satchwell, Burgaw. The sanitary condition of the county is not good. It is mainly because of imperfect drainage and bad drinking water. Much typhoid fever has prevailed. The condition of our jail is bad for want of attention to sanitation, which seems almost impossible to prevent. The jail is a fruitful source of disease.

PERQUIMANS—No Board of Health.

PITT—Dr. B. T. Cox, Reddallia. Malarial and typhoid fevers have prevailed in all portions of the county. Whooping-cough has made its appearance in one section again. Bronchitis very common the last few days of the month. Some acute tonsilitis and eczema. The sanitary condition of the public buildings is good. There have been a few cases of staggers among horses, and in some sections considerable hog cholera.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Ashboro. Seven cases of whooping-cough, four of typhoid fever, and some pneumonia, malarial fever, dysentery and diarrhoea have been reported. There has been an epidemic of cholera among chickens and hogs in all parts of the county. The sewerage of the jail is not sufficient to

take away the water; otherwise the sanitary condition of the public buildings is excellent.

RICHMOND—Dr. J. M. Covington, Rockingham. Two cases of whooping-cough, two of scarlatina, four of diphtheria and two of typhoid fever reported. The health of the Rockingham section is good. The poor-house needs improvement badly. The sanitary condition of the other public buildings is good.

ROBESON—Dr. R. F. Lewis, Lumberton. The general sanitary condition of the county is very good. Little sickness of any kind prevailing. Some whooping-cough and malarial fever reported. There has been an epidemic of cholera among hogs. The sanitary condition of the public buildings is very good with the exception of the county home. Improvements contemplated.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell. One case of diphtheria reported. Some mild malarial cases and colds have prevailed. The county seems to be in good sanitary condition, as the health of the people is exceptionally good, so far as I have heard. Weather delightful and roads good. The condition of the public buildings is good, and when we get the new iron fences around them, which our commissioners are preparing to have, our public buildings will present a very creditable appearance.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. No report.

SAMPSON—Dr. J. A. Stevens, Clinton. No report.

STANLY—Dr. A. C. Boyles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Forty cases of whooping-cough, twenty-three of diphtheria and fifteen of typhoid fever reported. The sanitary condition of public buildings is good.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. No report.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander. No report.

**UNION**—Dr. W. C. Ramsay, Monroe. Twelve cases of whooping-cough, two of diphtheria and five of typhoid fever reported. Poor-house is in good sanitary condition. A new jail is in process of erection.

**VANCE**—Dr. A. Cheatham, Henderson. No report.

**WAKE**—Dr. James McKee, Raleigh. One case of whooping-cough and four of typhoid reported. The general sanitary condition of the county and public buildings is good.

**WARREN**—Dr. P. J. Macon, Warrenton. No report.

**WASHINGTON**—No Board of Health.

**WATAUGA**—Dr. W. B. Council, Boone. Ten cases of scarlatina reported; it prevails in a very mild form among children. The sanitary condition of the county good in every way, and the people remarkably healthy. The jail and poor-house are new, well kept, clean and healthy. No sickness among the inmates during the past month.

**WAYNE**—Dr. John Spicer, Goldsboro. No report.

**WILKES**—No Board of Health.

**WILSON**—Dr. Albert Anderson, Wilson. A few cases of whooping-cough and several of typhoid fever reported. Malarial fevers have prevailed in all parts of the county. The sanitary condition of the public buildings is good at present.

**YADKIN**—Dr. T. R. Harding, Yadkinville. No report.

**YANCEY**—Dr. J. L. Ray, Burnsville. Three cases of typhoid fever, two of cholera-infantum, six of diarrhoea and two of pneumonia reported. The sanitary condition of the jail is not good; it is not kept clean. The poor-house is very well kept.

#### *Review of Diseases for September, 1892.*

(Forty-two counties reporting.)

**CHOLERA-INFARTUM** was reported from Yancey.

**CHICKEN CHOLERA**—From Randolph.

**GASTRITIS**—From Burke.

**DIARRHŒA**—From Iredell, Randolph and Yancey.

**DIPHTHERIA**—From Alamance, Caldwell, Duplin, Montgomery†, New Hanover, Richmond, Stokes and Union—8 counties.

**DYSENTERY**—From Burke and Randolph.

**HOG CHOLERA**—From Columbus, Duplin, Pitt, Randolph and Robeson.

**MALARIAL FEVER**—From Caswell, Columbus, Franklin, Iredell, Johnston, Lenoir, Montgomery, Pitt†, Randolph, Robeson, Rowan and Wilson—12 counties.

**MALARIAL FEVER, HEMORRHAGIC**—From Montgomery, New Hanover and Orange.

**MALARIAL FEVER, PERNICIOUS**—From Johnston and Orange.

**MALARIAL FEVER, TYPHO**—From Caswell.

**MEASLES**—From Carteret†, Montgomery and New Hanover.

**MILK-SICKNESS**—From Haywood.

**PNEUMONIA**—From Randolph and Yancey.

**SCARLATINA**—From Caldwell and Richmond.

**STAGGERS (horses)**—From Pitt.

**TONSILITIS**—From Caldwell, Iredell, Moore, Orange and Pitt.

**TYPHOID FEVER**—From Buncombe, Caldwell†, Columbus, Duplin, Granville, Haywood, Henderson, Iredell, Johnston, Lincoln, McDowell, Mitchell, Montgomery†, Moore, Nash, New Hanover, Pender†, Pitt†, Randolph, Richmond, Stokes, Union, Wake, Wilson and Yancey—25 counties.

**WHOOPING-COUGH**—From Cumberland, Durham, Edgecombe†, Mitchell, Moore, Montgomery†, Nash, New Hanover, Orange, Pitt, Randolph, Richmond, Robeson, Stokes, Union, Wake and Wilson—16 counties.

† Numerous.

**Summary of Mortuary Reports for September,  
1892.**

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(EIGHTEEN TOWNS.)

*White. Col'd. Total.*

Aggregate population 54,193 44,912 99,105

Aggregate deaths 63 84 147

Annual death-rate per

1,000 represented, 13.9 22.5 17.8

Deaths under 5 years of age, 63

*Causes of death.*

Typhoid fever 15 -- 15

Malarial fever 2 6 8

Diphtheria .....	--	4	4
Whooping-cough ....	1	1	2
Pneumonia .....	--	2	2
Consumption .....	3	11	19
Brain diseases.....	2	2	4
Heart diseases.....	7	3	10
Neurotic diseases....	2	1	3
Diarrhoeal diseases...	5	10	15
All other diseases....	12	35	47
Accident .....	3	1	4
Suicide .....	1	1	2
Still-born .....	5	7	12
	—	—	—
	63	84	147

*Condition of Jails and Poor-houses by Counties for September, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....	4 (a)				27			
Alexander.....	1	500		1	10	550		2
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....								
Burke.....	4				6	700		
Cabarrus.....								
Caldwell.....	8	(b)	0	6	9	1,000	4	3
Camden.....								
Carteret.....	1	*	0	0	0			
Caswell.....	3	500			20	1,000	9	2
Catawba.....	3		1	1	26		9	13
Chatham.....								
Cherokee.....	6							
Chowan.....								
Clay.....								
Cleveland.....								
Columbus.....	8	*		4	11	*		0
Craven.....								
Cumberland.....	5				15			
Currituck.....								
Dare.....								
Davidson.....								
Davie.....								
Duplin.....	1				8			
Durham.....	22 (c)	1,000		4	16	1,000		2
Edgecombe.....	16	*	5	6	22	*	7	5
Forsyth.....								

\* Space exceeds one thousand feet. (a) Includes 4 in house of correction. (b) Less than one thousand feet. (c) Includes 12 in house of correction.

*Condition of Jails and Poor-houses by Counties for September, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin.....	12				20			
Gaston.....								
Gates.....								
Graham.....								
Granville.....	17 (a)	*	2	1	22	*	9	5
Greene.....	1	500			10			1
Guilford.....								
Halifax.....								
Harnett.....								
Haywood.....	4			3				
Henderson.....	5				2			
Hertford.....								
Hyde.....								
Iredell.....	8				23			
Jackson.....								
Johnston.....	2	1,000			11	*		
Jones.....								
Lenoir.....	0				0			
Lincoln.....	10	700			23	100		
McDowell.....	1	*		1	12	*		0
Macon.....								
Madison.....								
Martin.....								
Mecklenburg.....								
Mitchell.....	2				5			
Montgomery.....	8		1	4	15		3	7
Moore.....	2	*	0	0	8	*	1	3
Nash.....	4	600			27	1,000	6	3
New Hanover.....	26 (b)	600	10	6	19	1,000	15	8
Northampton.....								
Onslow.....								
Orange.....	4	512	0	2	16	*	9	4
Pamlico.....								

\* Space exceeds one thousand feet. (a) Includes 11 in house of correction. (b) Includes 8 in house of correction.

*Condition of Jails and Poor-houses by Counties for September, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number Prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evide- ce of success- ful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evide- ce of success- ful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....	3				4			
Perquimans.....								
Person.....								
Pitt.....					19			
Polk.....								
Randolph.....	3				26			
Richmond.....	12		3	3	10		1	1
Robeson.....	15	460			9	800		
Rockingham.....								
Rowan.....	11	750	1	6	16	*	0	1
Rutherford.....								
Sampson.....								
Stanly.....								
Stokes.....	12	500	4	5	21	400	3	2
Surry.....								
Swain.....								
Transylvania.....								
Tyrrell.....								
Union.....	8	1,000			15	*		2
Vance.....								
Wake.....	69 (a)	*			68	*		
Warren.....								
Washington.....								
Watauga.....	4	600	0	1	7	*	2	0
Wayne.....								
Wilkes.....								
Wilson.....	3	*	0	2	16	*	4	3
Yadkin.....								
Yancey.....	3	768	0	1	1	*		

\* Space exceeds one thousand feet. (a) Includes 41 in house of correction.

*Mortuary Report for September, 1892.*

**Meteorological Summary for North Carolina, September, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, Ph. D., Director.

C. F. VON HERMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										NO. OF DAYS					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.
Bakersville .....	61.9	84	25	76.7	33	27	47.1	51	29.6	.....	2.61	.....	.....	5	W.	
Columbus .....	62.0	73	1	69.5	42	28	54.4	36	15.1	78.0	15.71	19	5	6	6	N.
Charlotte .....	69.6	89	5	79.1	49	18	59.6	43	19.5	72.0	2.27	17	6	7	7	N. E.
Chapel Hill .....	71.2	93	6	85	44	26	57.0	49	28.5	.....	1.97	.....	.....	7	.....	
Douglas .....	65.2	87	25	83.5	40	28	47.2	47	36.3	.....	4.20	14	11	5	4	.....
Horse Cove .....	63.1	78	25	71.2	44	27	55.0	34	16.2	78.9	7.87	16	8	6	7	E.
Greensboro .....	68.1	84	25	76.0	50	28	60.3	34	15.6	.....	2.38	.....	.....	6	.....	
Kitty Hawk .....	71.8	83	5	75.7	58	29	68.0	25	7.7	.....	2.13	9	10	11	10	N. E.
Littletown .....	67.0	87	5	80.9	43	27	53.1	44	27.8	.....	3.32	.....	.....	5	.....	
Louisburg .....	67.4	83	1	76.2	46	27	58.7	37	17.5	.....	1.44	16	7	7	4	N. W.
Lenoir .....	65.1	80	24	74.2	44	28	57.9	36	16.3	.....	5.90	.....	.....	4	.....	
Morganton .....	66.3	83	4	76.3	44	28	65.3	39	11.0	78.8	7.52	.....	.....	6	.....	
Mount Airy .....	61.0	81	5	76.1	42	28	51.8	42	24.3	.....	4.20	21	3	6	4	S. W.
Oak Ridge .....	66.5	85	25	77.6	44	28	55.4	41	22.3	80.7	3.71	11	12	7	6	N. E.
Pittsboro .....	69.0	87	25	78.9	44	27	59.2	43	19.7	.....	0.40	16	6	8	2	N. E.
Raleigh .....	69.8	87	25	79.5	48	28	60.2	39	19.3	77.0	1.98	13	8	9	8	N.
Southport .....	72.6	83	6	79.3	55	28	65.9	28	13.4	.....	4.68	10	9	11	13	N. E.
Southern Pines .....	68.4	93	1	82.4	44	28	51.5	49	26.9	.....	1.78	16	6	8	5	N. E.
Salisbury .....	70.4	81	1	77.8	52	28	63.0	32	14.8	.....	2.81	.....	.....	5	.....	
Weldon .....	69.8	87	25	80.0	44	28	59.7	43	20.3	.....	2.72	15	3	12	5	N.
Washington .....	69.1	89	26	83.3	42	6	54.9	47	28.4	84.0	5.75	14	3	13	12	N. E.
Wilmington .....	72.6	87	26	80.1	55	28	65.0	32	15.1	80.6	5.90	10	12	8	10	N. E.

## STATE METEOROLOGICAL SUMMARY FOR SEPTEMBER, 1892.

Mean Barometer 30.15 inches; normal for September, 30.08.

Highest Barometer 30.42 inches, on the 30th, at Lynchburg, Va.

Lowest Barometer 29.65 inches, on the 13th, at Lynchburg, Va.

Mean temperature 68.6 degrees; normal for September, 70.2 degrees.

Highest temperature 93, on the 6th, at Chapel Hill, and on the 1st at Southern Pines.

Lowest temperature 33, on the 27th, at Bakersville.

Average rain-fall, 3.86 inches; normal for September, 4.65 inches.

Greatest monthly rain-fall, 15.74 inches, at Columbus.

Least monthly rain-fall, 0.40 inches, at Pittsboro.

Average number of cloudless days, 15.

Average number of partly cloudy days, 8.

Average number of cloudy days, 7.

Average number of rainy days, 7.

Prevailing wind direction, north-east; average velocity, 7.2 miles per hour. Prevailing direction from many years' observations, north-east. Normal velocity, 7.0 miles per hour.

# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

*Published Monthly at the Office of the Secretary of the Board, at Raleigh, N. C.*

SUBSCRIPTION FIFTY CENTS A YEAR.

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GEO. GILLETT THOMAS, M. D., Wilmington.

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Entered at the post-office at Raleigh, N. C., as third-class mail matter.

VOL. VII ~~November~~ DECEMBER, 1892.

NO. 8.

## *The State Board of Health.*

The death of Dr. Thomas F. Wood made vacant the office of Secretary of this useful body. The peculiar character of the work of such organizations makes its Secretary its most important officer. \* \* \* \* \* But the Secretary and the body of workers to which he is attached needs the hearty coöperation of the medical profession and the support of the whole people of the State.

There is a great lack of knowledge in all matters connected with public health, and a negligence in this lack of knowledge and of care the individual shows in protecting himself and his family by failing to provide healthful surroundings for himself and them. Where there is sickness due to filth accumulations, or the spread of epidemic disease due to like causes, it is the duty and it will be the work of the Board of Health to advise for the arrest of the disease by the intelligent destruction of the cause of sickness. There is a great field for the labor of the Board, and there is an honest desire among its members to enter and do the work set apart for them. The idea that these

gentlemen are busying themselves only in collecting vital statistics, or having jails or poor-houses looked after, has prevailed long enough. There is and can be no need for aid from outside the State to investigate an outbreak of disease and to provide a remedy. The work can be done by these State officials, and a prompt application for help or information will always receive a prompt reply. Just now, in view of the threatened invasion of this country by cholera, there is a duty before the local health officers and the physicians at large, which is plain and simple. The history of cholera since 1832 makes it quite certain that next spring will be the period of greatest danger to the States, especially to those along the seaboard, unless there should be such energetic measures adopted in Europe during the winter months as will stamp out the poison. To prepare their people for such an emergency as the presence of one or more cases of the disease in a community, whether a large or small one, is the work that lies clearly before the members of the profession. And the first step in the direction of prevention is cleanliness—in the streets and on private lots. Herein lies the secret of escape.

A clean town, with good drinking water, need not fear the spread of the disease if the people will be guided by the sound advice of the physicians. It is not Utopian to expect or believe that such a desirable state of affairs can be accomplished. It means thrift and life to business, as it means freedom from epidemics and sickness, which, if they come, decrease the tax returns and throw a damper on commercial enterprise that many months will not cure. If the present disposition to panic which the mention of cholera arouses, shall end in a great sanitary revival led by the Board of Health and executed carefully and conscientiously in every home in the State and in every town and hamlet, the dread disease which has worked such sad havoc in the cities and villages of Europe will find no resting place here, and the fear of its invasion will become a great beneficence in the lessons the fear of spread ought to, and will, teach our people. If there should be any further danger the Board of Health will no doubt issue bulletins containing such directions for the care of the person and the premises as will be easily understood and carried out.

In this same line there is now a study for the Board, which it seems not untimely to mention. A goodly number of towns in the State have for years had more or less typhoid fever prevalent in them. The annual loss of life and the loss of time to individuals, and therefore to the community in which they live, are serious subjects for the sanitarian. There exists a widespread apathy in this direction. The inhabitants of these towns are generally impressed with the belief that the atmosphere in which they live is pure and has in it the necessary qualities to overcome disease. It is a burdensome responsibility to attack the character of the water which people drink. One might as well attempt to interfere with the precious legends of localities as to say that a doubt of the purity of the drinking water could exist. But the fact remains that the disease is present, that sanitary policing is unheard of, or recklessly neglected, and a revival of proper authority placed in the hands of well-informed and zealous men will, we believe, be of incalculable benefit to these localities.—*Editorial in North Carolina Medical Journal for October.*

### *Everybody's Medical Duty.*

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The following from the *American Practitioner and News*, very justly and clearly pictures the situation and character of a physician's life: "Herodotus tells us that the Babylonians had physicians, that when anyone was sick he was carried into the streets and placed where the greatest number of passers-by could see him; everybody was bound to stop and consider the case, and if an individual passed who had suffered in what seemed to him a similar manner, he was compelled to explain the method of his cure. There is no necessity for this sort of thing now, although a large section of the public enjoys nothing more than suggesting remedies for all sorts of complaints, and dabbling generally in a little physic. But there never was a time in the history of civilization when there was greater need that everybody should recognize the fact that he owes a medical duty to his neighbor which he is bound to perform. Dr. George Gould recently delivered an address in Philadelphia on the subject 'Everybody's Medical Duty,' in the course of which he bitterly complained of the way in which the public at large leaves the medical profession to struggle under its Atlantean world of deputed responsibility. The indifference, the want of sympathy, to say nothing of the actual opposition experienced by those whose work it is to contend against disease is as discouraging to our profession as it is disgraceful to our age of science. There never was a body of men animated by a spirit of devotion and self-sacrifice such as characterizes the medical practitioners of the age. How is this devotion and self-sacrifice recognized? The quacks, the charlatans, and the knaves make fortunes, while the educated and conscientious practitioners are expected to do a large amount of work for nothing. Up to now the work of the physician has been the cure of sick persons. Now it has largely become the prevention of sickness. Patients will coöperate more or less in the work of being healed of their diseases, and are not wholly ungrateful to the healer, but those who are in daily danger of becoming patients will do little or nothing to assist the men who are fighting to keep disease from their doors. They

laugh at bacteria and mock at microbes; carry the germs of disease in their clothes from house to house; sweep up the dust of the streets in their trailing skirts; take little or no pains to disinfect the excreta from such infectious cases as occur in their own homes; oppose with all their influence the erection of hospitals for infectious diseases in their midst, careless as to what becomes of the patients so long as they pass not by their own doors; impede the efforts of medical officers of health and inspectors of meat and other food to improve the hygienic condition of our towns and the quality of food we consume; disregard the authoritative condemnation of the corset, and in a multitude of ways help to make the work of the modern physician as hard as possible. Chaldea and Babylon could have taught us this, at least, that everybody is bound to help the State to the utmost of his power in the battle against disease and death."—*Charlotte Medical Journal*.

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**Summary of Reports from County Superintendents for October, 1892.**

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**ALAMANCE**—Dr. G. W. Long, Graham. Whooping-cough and some cases of malarial fever in the county. The sanitary condition of the county and public buildings is good, except the jail, and that is in as good a condition as an old building will permit. The new Home is completed and occupied.

**ALEXANDER**—Dr. J. B. Watts, Taylorsville. One case of typhoid fever reported. The sanitary condition of the county is good, and has been for several months past. That of the public buildings is about as in my last report. No change, with the exception of a couple of new rooms at the Home for the benefit of the paupers.

**ALLEGHANY**—No Board of Health.

**ANSON**—Dr. F. F. Ashe, Wadesboro. No report.

**ASHE**—No Board of Health.

**BEAUFORT**—Dr. S. T. Nicholson, Washington. No report.

**BERTIE**—No Board of Health.

**BLADEN**—Dr. N. Robinson, Elizabethtown. No report.

**BRUNSWICK**—No Board of Health.

**BUNCOMBE**—Dr. C. E. Hilliard, Asheville. No reports of any special diseases. Sanitary condition of county good, and of public buildings very good.

**BURKE**—Dr. J. L. Laxton, Morganton. Two cases of diphtheria and three of typhoid fever reported, also a few cases of jaundice. The sanitary condition of the public buildings is as good as such structures will admit of. They were not built with a view to good sanitation, and no efforts are to be made soon at improvement. Hog cholera has prevailed in some sections.

**CABARRUS**—No Board of Health.

**CALDWELL**—Dr. A. A. Kent, Lenoir. Five cases of whooping cough, two of scarlatina, five of typhoid fever, and a few of pneumonia. Colds and sore throats in all parts of the county. One death from typhoid fever, and one from membranous croup. Sanitary condition of the poor-house good, and that of the jail bad, and no efforts at improvement.

**CAMDEN**—No Board of Health.

**CARTERET**—Dr. M. F. Arendell, Morehead City. No diseases dangerous to public health reported. Sanitary condition of county and public buildings good.

**CASWELL**—Dr. R. H. Williamson, Yanceyville. No diseases to report. Sanitary condition of county and public buildings good.

**CATAWBA**—Dr. Geo. W. West, Newton. Six cases of typhoid fever. I get reports from only three physicians out of twenty-one. The jail is in good sanitary condition. There have been two good buildings erected at the poor-house which will add materially to the health and comfort of the inmates.

**CHATHAM**—Dr. H. T. Chapin, Pittsboro. County in remarkably good sanitary condition. The public buildings are in good condition. No diseases reported.

**CHEROKEE**—Dr. J. F. Abernathy, Murphy. A few cases of la grippe reported. Nothing more to report. Jail and poor-house in fair condition.

CHOWAN—No Board of Health.

CLAV—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. Several cases of typhoid fever reported. Sanitary condition of public buildings good.

COLUMBUS—Dr. I. Jackson, Whiteville. One case of typhoid fever in my own practice. I hear of a few cases of malarial fever. The sanitary condition of the county is remarkably good. No reports from physicians. There is hog-cholera in some portions of the county. The sanitary condition of the public buildings is very good, and all needed repairs are immediately attended to.

RAVEN—Dr. Leinster Duffy, Newbern. No report.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. One case of diphtheria. Sanitary condition of the county and public buildings very good.

CURRIE—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. No reports from physicians. The sanitary condition of the county is unusually good. I hear of a few cases of diphtheria, and two deaths are supposed to have been caused thereby at the hands of a quack. The condition of the public buildings is good, except that the jail has a very defective sewer, which is apt to produce sickness in the jail and in the neighborhood.

DAVIE—No Board of Health.

DUPLIN—Dr. J. W. Blount, Kenansville. No report.

DURHAM—Dr. N. M. Johnson, Durham. No epidemic has prevailed. The sanitary condition of the county and public buildings is good.

EDGECOMBE—Dr. Donald Williams, Tarboro. October has been a very dry month, and intermittent fever and typho-malarial fever have prevailed in most sections of the county. The jail and poor-house are clean and well-kept.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. L. Foster, Louisburg. Two cases of typhoid fever. Whooping-cough and pneumonia have prevailed in this vicinity. Sanitary condition of the public buildings very good.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. The general health of the county has been exceptionally good. No diseases reported. The sanitary condition fairly good. The water supply very scarce, owing to prolonged drought. The sanitary condition of the public buildings is as good as the buildings will admit of.

GREENE—Dr. E. H. Sugg, Saow Hill. A few cases of typhoid fever reported. Malarial fever has prevailed. The sanitary condition of the county and public buildings is good.

GUILFORD—Dr. E. F. Michaux, Greensboro. Health of county generally good. I report several cases of malarial and typho-malarial fevers, and some tonsillitis. Have heard of two or three cases of lobar pneumonia. Physicians in town and country do not send in reports. Sanitary condition of public buildings good, excepting our jail, which, however, is as good, perhaps, as the building will admit of.

HALIFAX—No Board of Health.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. H. Way, Waynesville. Four cases of typhoid fever, one severe and three very mild, each in separate families and living apart. Health of the county, in the main, very good. The public sentiment relative to the value of sanitation is, I believe, growing, and the people are more prompt in paying heed to sanitary advice. The jail is in about the usual condition; as good, perhaps, as the miserable building can be kept.

HENDERSON—Dr. J. L. Edgerton, Hendersonville. Three cases of typhoid fever. The sanitary condition of the county and public buildings is good.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. M. J. Hill, Statesville. No report.

JACKSON—No Board of Health.

JOHNSTON—Dr. R. J. Noble, Smithfield. Two cases of whooping-cough. Sanitary condition of county good.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. Two cases of scarlatina. No diseases reported to the Superintendent. Sanitary condition of the county supposed to be good, as I have heard nothing to the contrary.

LINCOLN—Dr. W. L. Crouse, Lincolnton. No report.

MACON—Dr. J. M. Lyle, Franklin. No report.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamson. No report.

MCDOWELL—Dr. E. A. Cheek, Marion. Typhoid fever prevailing; probably twenty cases, but of a mild type. Some diphtheria and whooping-cough also reported. Public buildings in good condition.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville. An epidemic of whooping-cough; twenty cases reported in and near Bakersville. Three cases of typhoid fever reported. Sanitary condition of public buildings fairly good.

MONTGOMERY—Dr. F. E. Asbury, Asbury. No report.

MOORE—Dr. Gilbert McLeod, Carthage. No report.

NASH—Dr. J. J. Mann, Nashville. Ten cases of typhoid fever reported. A low type of continued fever has prevailed in all parts of the county. There has been an epidemic of hog-cholera in some sections. Sanitary condition of public buildings good. I am making efforts to have buildings at the poor-house made more comfortable.

NEW HANOVER—Dr. F. W. Potter, Wilmington. One case of diphtheria, five of typhoid, one of pernicious malarial, and one of hemorrhagic malarial fever. The sanitary con-

dition of the county is very good. A few cases of diarrhoea attended with dyspeptic symptoms have existed. Jail is in good condition and well kept. One case of asthma; no deaths. House of correction in good condition; no sickness; no deaths. Poor-house is well-provided and well-kept, and in good sanitary condition; two persons have died, one from debility consequent upon extreme old age, the other from softening of the brain.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. Nine cases of diphtheria, two of typhoid fever, and two of hemorrhagic-malarial fever reported. Malarial fevers have prevailed in all parts of the county. Sanitary condition of the jail is good; that of the poor-house is not so good; that of the other public buildings is fairly good.

ONSLOW—No Board of Health.

ORANGE—Dr. D. C. Parris, Hillsboro. No report.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—No report.

PERQUIMANS—No Board of Health.

PITT—Dr. B. T. Cox, Redallia. Two cases of pernicious malarial and three of hemorrhagic-malarial fevers reported. Malarial and typhoid fevers have prevailed in many parts of the county. Some whooping-cough heard from. Staggers in horses and cholera in hogs reported.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Ashboro. Three cases of whooping-cough, one of scarlatina, and eight of typhoid fever reported. The case of scarlatina developed in Ashboro, and, I think, it was brought from St. Louis, as a family, all of whose children had it a few months ago, is visiting the family in which it occurred. The sanitary condition of the public buildings is good. The clothing and bedding at the County Home is clean, warm and sufficient. Hog-cholera reported.

RICHMOND—Dr. J. M. Covington, Rockingham. Three cases of diphtheria and two of typhoid fever reported. The poor-house needs improvement badly. The sanitary condition of the other public buildings is good.

ROBESON—Dr. R. F. Lewis, Lumberton. There is some whooping-cough. The sanitary condition of the county, court-house and jail is good; that of the Home very poor. Plans are on foot to remove and replace with new and better buildings. There has been an epidemic of hog-cholera.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Two cases of diphtheria, three of typhoid fever, and one of pernicious malarial fever. These cases have occurred in my practice or to my knowledge in the city; no report from any physician. I hear that malarial diseases have been very prevalent in some of the country districts. I think the general sanitary condition of the county is good. The public buildings are in good condition. The outer appearances might be greatly improved by paint and enclosing by suitable fences, all of which, I understand, will be done in the near future.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. Some whooping-cough and a few cases of typhoid and scarlet fevers reported. Little sickness in the county. The jail and poor-house are in good condition.

SAMPSON—Dr. John A. Stevens, Clinton. A few cases of typhoid and malarial fevers and some cases of whooping-cough. No report from other physicians. The sanitary condition of the poor-house is very good. We are without a jail as it was burned, together with one-half of the business portion of our town, last month. Our prisoners are sent to Wayne County jail. There has been an epidemic of hog-cholera.

STANLY—Dr. A. C. Boyles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Forty cases of whooping-cough, four of diphtheria and fifteen of typhoid fever. The sanitary condition of the public buildings is good.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. The general sanitary condition of the county is better than for several years. One case of capillary bronchitis to report. The public buildings

are in a bad sanitary condition and no steps are being taken to improve them.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander, Columbia. Four cases of typhoid fever, one of pernicious and one of hemorrhagic malarial fever. Sanitary condition of the county good.

UNION—Dr. W. C. Ramsay, Monroe. No report.

VANCE—Dr. A. A. Cheatham, Henderson. The sanitary condition of the county and public buildings good.

WAKE—Dr. James McKee, Raleigh. Four cases of typhoid fever. No epidemic of any kind. The sanitary condition of the county and public buildings is good.

WARREN—Dr. P. J. Macon, Warrenton. No report.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Council, Boone. No report.

WAYNE—Dr. John Spicer, Goldsboro. No report.

WILKES—No Board of health.

WILSON—Dr. A. Anderson, Wilson. Three cases of pernicious malarial fever. Intermittent and remittent fevers have prevailed in all parts of the county. The sanitary condition of the public buildings is good.

YADKIN—Dr. T. R. Harding, Yadkinville. No report.

YANCEY—Dr. J. L. Ray, Burnsville. One case of typhoid fever. The sanitary condition of the county is very good, better than usual. The condition of the jail is very poor. It is very filthy. The poor-house is very well kept.

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*Review of Diseases for October, 1892.*

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(Forty-three counties reporting.)  
CHOLERA in hogs was reported from Burke, Nash, Pitt and Randolph.

DIPHTHERIA—From Burke, Cumberland, Davidson, McDowell, New Hanover, Northampton, Richmond, Rowan and Stokes.

LA GRIPPE—From Cherokee.

MALARIAL FEVER—From Alamance, Columbus, Edgecombe, Green, Guilford, Pitt, Rowan, Sampson and Wilson.

MALARIAL FEVER, HEMORRHAGIC—From New Hanover, Pitt and Tyrrell.

MALARIAL FEVER, PERNICIOUS—From New Hanover, Pitt, Rowan, Tyrrell and Wilson.

MALARIAL FEVER, TYPHO—From Edgecombe, Guilford and Northampton.

SCARLATINA—From Caldwell, Lenoir, Randolph and Rutherford.

STAGGERS (horses)—From Pitt.

TYPHOID FEVER—From Alexander, Burke, Caldwell, Catawba, Cleveland, Columbus, Franklin, Greene, Haywood, Henderson, McDowell, Mitchell, Nash, New Hanover, Northampton, Pitt, Randolph, Richmond, Rowan, Rutherford, Sampson, Stokes, Tyrrell Wake and Yancey—25 counties.

It is a noteworthy fact that not a single case of small-pox occurred during the year 1890 in the British Army. If this be not evidence of the protection afforded by re-vaccination against a malady once so common—and still disastrously fatal in armies where this precaution is not vigorously enforced—then logic and reason are mere accomplishments.—*Medical Review.*

*Summary of Mortuary Reports for October,  
1892.*

(TWENTY TOWNS.)

	White.	Col'd.	Total.
Aggregate population.	67,147	48,819	115,966
Aggregate deaths.....	75	94	169
Annual death-rate per 1,000 represented,	13 4	23 1	17 5
Deaths under 5 years of age,			60

*Causes of death.*

Typhoid fever .....	5	7	12
Malarial fever.....	7	2	9
Diphtheria .....	1	0	1
Pneumonia .....	5	1	6
Consumption .....	13	13	26
Brain diseases.....	2	5	7
Heart diseases.....	6	5	11
Neurotic diseases....	2	3	5
Diarrhoeal diseases...	10	5	15
All other diseases....	18	42	60
Accident or violence..	0	2	2
Suicide .....	1	0	1
Still-born.....	5	9	14
	75	94	169

*Condition of Jails and Poor-houses by Counties for October, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Alamance.....	3							
Alexander.....	1	500		1	10	550		2
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....	32 (a)				20			
Burke.....	4				5			
Cabarrus.....								
Caldwell.....	2	*	0	2	9	*	4	3
Camden.....								
Carteret.....	1	*	0	1	0			
Caswell.....	2	1,000			20	1,000	9	3
Catawba.....	3		1	3	21		9	18
Chatham.....	2				21			
Cherokee.....		*				*		
Chowan.....								
Clay.....								
Cleveland.....	13			7	18			4
Columbus.....	9	*		6	11	*		0
Craven.....								
Cumberland.....	7				15			
Currituck.....								
Dare.....								
Davidson.....	6	*	0	2	24	720	0	2
Davie.....								
Duplin.....								
Durham.....		1,000				1,000		
Edgecombe.....	17	975	5	3	22	*	7	5
Forsyth.....								

\* Space exceeds one thousand feet. (a) Includes 25 in house of correction.

*Condition of Jails and Poor-houses by Counties for October, 1892.—Continued.*

COUNTIES.	JAIL.					POOR-HOUSE.				
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.		
Franklin.....	6	.....	.....	2	21	.....	.....	.....		
Gaston.....	.....	.....	.....	.....	.....	.....	.....	.....		
Gates.....	.....	.....	.....	.....	.....	.....	.....	.....		
Graham.....	.....	.....	.....	.....	.....	.....	.....	.....		
Granville.....	20 (a)	*	2	3	22	*	9	5		
Greene.....	4	590	.....	2	9	1,000	.....	1		
Guilford.....	18	693	.....	.....	35	1,143	.....	.....		
Halifax.....	.....	.....	.....	.....	.....	.....	.....	.....		
Harnett.....	.....	.....	.....	.....	.....	.....	.....	.....		
Haywood.....	5	.....	.....	4	.....	.....	.....	.....		
Henderson.....	4	.....	.....	.....	2	.....	.....	.....		
Hertford.....	.....	.....	.....	.....	.....	.....	.....	.....		
Hyde.....	.....	.....	.....	.....	.....	.....	.....	.....		
Iredell.....	.....	.....	.....	.....	.....	.....	.....	.....		
Jackson.....	.....	.....	.....	.....	.....	.....	.....	.....		
Johnston.....	3	800	.....	.....	11	1,200	.....	.....		
Jones.....	.....	.....	.....	.....	.....	.....	.....	.....		
Lenoir.....	3	*	1	.....	.....	.....	.....	.....		
Lincoln.....	.....	.....	.....	.....	.....	.....	.....	.....		
McDowell.....	2	.....	0	1	13	.....	0	1		
Macon.....	.....	.....	.....	.....	.....	.....	.....	.....		
Madison.....	.....	.....	.....	.....	.....	.....	.....	.....		
Martin.....	.....	.....	.....	.....	.....	.....	.....	.....		
Mecklenburg.....	.....	.....	.....	.....	.....	.....	.....	.....		
Mitchell.....	2	.....	.....	.....	6	.....	.....	.....		
Montgomery.....	.....	.....	.....	.....	.....	.....	.....	.....		
Moore.....	.....	.....	.....	.....	.....	.....	.....	.....		
Nash.....	10	600	6	8	23	1,000	4	3		
New Hanover.....	26 (b)	600	18	15	17	900	15	7		
Northampton.....	6	600	3	3	36	800	8	10		
Onslow.....	.....	.....	.....	.....	.....	.....	.....	.....		
Orange.....	.....	.....	.....	.....	.....	.....	.....	.....		
Pamlico.....	.....	.....	.....	.....	.....	.....	.....	.....		

\* Space exceeds one thousand feet. (a) Includes 42 in house of correction. (b) Includes 8 in house of correction.

*Condition of Jails and Poor-houses by Counties for October, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined,	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....								
Perquimans.....								
Person.....								
Pitt.....					18			
Polk.....								
Randolph.....	3				28			
Richmond.....	11		9	3	9		1	1
Robeson.....	5	*			9	800		
Rockingham.....								
Rowan.....	17 (a)	*	0 (b)	0 (b)	16	*	1	1
Rutherford.....								
Sampson.....					21			
Stanly.....								
Stokes.....	4	500	2	2	19	600	5	3
Surry.....								
Swain.....	2							
Transylvania.....								
Tyrrell.....	2	1,100		1	0	1,100		
Union.....								
Vance.....	1	*			15	*		
Wake.....	61 (c)	*			73	*		
Warren.....								
Washington.....								
Watauga.....								
Wayne.....								
Wilkes.....								
Wilson.....	3	*	0	3	17	*	3	4
Yadkin.....								
Yancey.....	8	288	2	5	1			

\* Space exceeds one thousand feet. (a) Includes 13 on public roads. (b) Applies to jail only.  
(c) Includes 49 in house of correction.

*Mortuary Report for October, 1892.*

\*Excluding the still-born the figures would be: White 35.4, colored 0.0, and total 30.0.

Southpeas

**Meteorological Summary for North Carolina, October, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).								NO. OF DAYS				Prevailing Wind.			
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	
Bakersville .....	53.0	88	15	68.7	20	34	37.3	68	31.4	.....	0.39	26	.....	5	1	W.
Charlotte .....	60.1	83	1	70.7	34	26	49.7	49	21.0	.....	0.23	19	8	4	3	N. E.
Columbus .....	54.6	74	1	63.2	28	28	46.0	46	17.2	.....	0.49	20	10	1	3	N.
Chapel Hill .....	59.8	90	1	74.5	30	31	45.1	60	29.4	.....	0.27	.....	.....	2	.....	
Douglas .....	55.2	83	22	75.7	25	26	34.8	58	40.9	.....	0.51	22	1	5	2	W.
Goldsboro .....	61.2	88	16	72.1	33	31	50.2	55	21.9	.....	0.73	.....	.....	5	.....	
Horse Cove .....	55.6	76	16	65.0	27	26	46.3	49	18.7	70.9	0.62	15	11	5	4	N.W.
Kitty Hawk .....	60.6	80	16	66.6	41	26	54.5	39	12.1	76.4	0.78	16	13	2	8	N. E.
Littleton .....	56.0	86	1	69.9	29	27	42.0	57	27.9	.....	0.76	.....	.....	4	.....	
Louisburg .....	54.8	89	16	66.3	32	30	43.4	48	22.9	.....	0.36	21	6	4	2	N.W.
Lenoir .....	54.9	76	1	64.1	29	31	47.0	47	17.1	.....	T	.....	.....	.....	.....	
Morganton .....	56.5	80	16	68.8	29	31	46.3	51	22.5	.....	0.20	.....	.....	2	.....	
Mount Airy .....	54.3	80	1	68.5	26	31	40.1	54	28.4	.....	0.28	19	6	6	1	N.W.
Oak Ridge .....	57.4	82	16	68.8	31	26	46.0	51	22.8	.....	0.78	14	17	19	3	W.
Pittsboro .....	56.4	86	1	68.6	25	31	44.3	61	24.3	.....	0.01	9	18	4	1	N. E.
Raleigh .....	59.0	85	1	69.6	33	31	48.5	52	21.1	67.2	0.53	17	7	7	5	N.
Southport .....	62.2	82	5	70.4	36	26	54.0	46	16.4	78.4	0.98	17	9	5	7	N. E.
Southern Pines .....	58.6	86	4	73.5	28	26	43.8	58	29.7	.....	0.34	7	20	4	1	S. W.
Salisbury .....	60.2	80	1	68.4	33	31	51.9	47	16.5	.....	0.53	.....	.....	3	.....	
Weldon .....	57.9	85	1	70.7	28	31	45.1	57	25.6	.....	1.05	19	3	9	4	N.
Washington .....	59.4	90	15	77.6	23	31	41.2	67	36.4	.....	1.33	20	9	2	4	N. E.
Wilmington .....	62.6	83	21	71.5	38	26	53.8	45	17.7	78.0	0.57	21	4	6	5	N. E.

## STATE METEOROLOGICAL SUMMARY FOR OCTOBER, 1892.

Mean Barometer 30.11 inches; normal for October, 30.09.

Highest Barometer 30.45 inches, on the 30th, at Chattanooga, Tenn., and Lynchburg, Va.

Lowest Barometer 29.70 inches, on the 4th, at Kitty Hawk.

Mean temperature 58.2 degrees; normal for October, 59.7 degrees.

Highest temperature 91, on the 19th, at Rockingham.

Lowest temperature 20, on the 21st, at Bakersville.

Average rainfall, 0.61 inches; normal for October, 3.66 inches.

Greatest monthly rain-fall, 2.71 inches, at Hatteras.

Least monthly rain-fall, trace, at Lenoir.

Average number of cloudless days, 18.

Average number of partly cloudy days, 8.

Average number of cloudy days, 5.

Average number of rainy days, 3.

Prevailing wind direction, north-east; average velocity, 7.5 miles per hour. Prevailing direction from many years' observations, north-east. Average hourly velocity, 7.5 miles.

# BULLETIN

OF THE

# NORTH CAROLINA BOARD OF HEALTH.

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RICHARD H. LEWIS, M. D., *Secretary and Treasurer*, Raleigh.

Entered at the post-office at Raleigh, N. C., as third-class mail matter.

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DECEMBER, 1892.

NO. 9.

### *An Acknowledgment.*

The Secretary of the State Board of Health desires to make his acknowledgments to the County Superintendents for their gratifying response to his appeal in the November BULLETIN. Out of a total of sixty-three counties with organized Boards of Health, forty-two reported in time for the delayed issue of that number. For the present number fifty-two have sent in reports, notwithstanding the fact of our going to press several days sooner—a gain of over 23 per cent. But there still remain eleven "no reports" to mar our pages, and I earnestly beg these gentlemen to write them out next month and ask all not to permit them to appear again. The next reports will be due at the beginning of a new year, the generally accepted time for turning over new leaves and making good resolutions. Let us all make them; and try faithfully to keep them.

RICHARD H. LEWIS, *Secretary.*

### *Sanitary Days.*

We have echoed the suggestion of Dr. Baker, the Secretary of the Michigan State Board of Health, that one day in the year should be ap-

propriated for an assemblage of the citizens in every town for sanitary discussion and instruction. Dr. J. F. Edwards, of the Pennsylvania State Board, adds a recommendation that two days, in spring and fall respectively, be set apart for general sanitary *action*, or domestic and municipal "cleaning up."

We hope that the good in both these suggestions may be in some way united and take effect. In working to such ends let us not forget to profit by the experience of the greedy dog who lost his bone in grabbing for its reflection in the water. Distraction is the bane of society, of education, of everything in these days. We stretch our arms around so many studies and exercises, so many interests, so many political "planks," so many celebrations, anniversaries, centenaries, and quadricentenaries, that all of them become worse than futile, tending to pure and universal gad and gabble, beneath which the only quite serious pursuits left are money-getting and pleasure. Modern life is getting much like the condition of a man trying to carry three water-melons under each arm.

But Sanitary Days, if held seriously and exclusively to the one grand desideratum, disinfe-

tion—a word that comprehends all modes of purifying, and of isolating or neutralizing the noxious living or dead—would be an institution tending back toward solid social character, and might well find the room in our years that is its most difficult problem, by displacing, or better occupying, some of the minor anniversaries that have multiplied in recent times. "Labor Day," the most unsubstantial of all fancies, might be thus occupied with a grand interest of the whole community, in place of a senseless parade adapted only to segregate a class and disintegrate the community. Independence Day, too, since its original purport has lost most of its practical importance and fallen into far from "innocuous" desuetude in the hands of childish noise-makers, might be turned into a Sanitary Day by a voluntary organization of enlightened citizens. This, by the way, we think, should be the mode of movement relied on, rather than legislative action. State authority could encourage the initiation and support of such measures by local sanitary associations, to be formed everywhere, but would prove ill-adapted for originating them with effect. It may be questioned, also, whether any fixed day would be suitable in all parts of the country or of a State, or would be as popular locally as one selected by each community for its own convenience. The purpose of "Arbor Day" well admits of combination with wider sanitary objects, and its season is also appropriate. The whole subject is a field for further discussion and illumination, and is well worth it.

Dr. Edwards's proposed combination day, of "*domestic* and municipal cleaning up" might well be referred to a committee partly of house-keeping ladies, who would have ideas and knowledge of their own about "cleaning house," and when to do it. To make it simultaneous would make it impossible, to a great extent, under the conditions of domestic "help," cause great loss of employment to labor, and interfere sadly with the plans of families.

Perhaps, on the whole, days of instruction and stimulation to the purpose of *keeping* clean, will be worth more than days of spasmodic "cleaning up."—*Sanitary Era*.

#### A Terrible Cholera Tragedy.

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At Ashabad, Turkestan, the cholera had almost disappeared early in August, and the event was celebrated with much rejoicing on the anniversary of the Emperor's name day, which occurs in that month. The Governor gave a dinner to which he invited a numerous company, and the various regiments were granted extra rations, that they might rejoice on the occasion. The day which began so auspiciously amidst general rejoicing, was destined to have an ending which has no parallel in history. Of the numerous guests who attended that dinner, one-half died within twenty-four hours. A military band of about fifty men who played during that fatal dinner lost forty of their number with cholera, and only ten of the men reached camp that night. One regiment lost half of its men and nine officers ere the sun rose the following morning, and within forty-eight hours 1,300 people died with cholera. The cause of this outbreak was clearly traced to a small stream of water which supplied the town. Four days previous the authorities were informed that cholera had broken out at a small Turkoman village situated on the banks of this stream about four miles above Ashabad. The inhabitants of this village were ordered to move their kilrikas (tents) several miles back on the hills, which they did. On the day previous to the reappearance of the cholera at Ashabad a very heavy rainstorm had occurred which washed the banks of the river and swept refuse and other matter from the abandoned village into the stream, and this matter was carried by the water into the city and distributed to all parts of the town by the numerous open canals through which the inhabitants were supplied with water. It was this contaminated water which caused the reappearance of the epidemic and the frightful mortality which followed. The population of Ashabad was not more than 13,000, of which ten per cent. died within forty-eight hours.—*Report of U. S. Consul Heenan, Sept. 9, 1892, quoted in Sanitary Era.*

*Summary of Reports from County Superintendents for November, 1892.*

**ALAMANCE**—Dr. G. W. Long, Graham. Whooping-cough, pneumonia, skin diseases, and a few cases of diphtheria, in sections of the county. No deaths from the last disease as yet. The buildings (cottages) at the home are new and comfortable. The jail is old style, and its condition is as good as its construction probably will permit. The condition of the work-house fair.

**ALEXANDER**—Dr. J. B. Watts, Taylorsville. No report.

**ALLEGHANY**—No Board of Health.

**ANSON**—Dr. E. F. Ashe, Wadesboro. No report.

**BEAUFORT**—Dr. S. T. Nicholson, Washington. No report.

**BERTIE**—No Board of Health.

**BLADEN**—Dr. N. Robinson, Elizabethtown. No report.

**BRUNSWICK**—No Board of Health.

**BUNCOMBE**—Dr. C. E. Hilliard, Asheville. No special disease has prevailed in any part of the county. The sanitary condition of the county and public buildings is good.

**BURKE**—Twenty cases of jaundice and one of typhoid fever reported. The sanitary condition of the county is good, and there is little sickness. The condition of the public buildings is as good as the old buildings will admit of, and no improvements are contemplated.

**CABARRUS**—No Board of Health.

**CALDWELL**—Dr. A. A. Kent, Lenoir. A few cases of pneumonia, bronchitis, tonsilitis and influenza, and four of typhoid fever, reported. The sanitary condition unusually good.

**CAMDEN**—No Board of Health.

**CARTERET**—Dr. M. F. Arendell, Morehead City. No diseases to report. The sanitary condition of the county is good. The public buildings are old, but clean and well kept.

**CASWELL**—Dr. R. H. Williamson, Yanceyville. The sanitary condition of the county and public buildings is good.

**CATAWBA**—Dr. Geo. H. West, Newton. Whooping-cough (2) and typhoid fever (11) reported. No reports from physicians to the superintendent. The jail and poor-house are in good sanitary condition.

**CHATHAM**—Dr. H. T. Chapin, Pittsboro. Very little sickness. The general sanitary condition of the county is excellent. The public buildings are in good condition.

**CHEROKEE**—Dr. J. F. Abernathy, Murphy. The health of the county is remarkably good, colds, with latent *La Grippe*, are the only ailments heard of.

**CHOWAN**—No Board of Health.

**CLAY**—No Board of Health.

**CLEVELAND**—Dr. O. P. Gardner, Shelby. No diseases to report. The sanitary condition of the county and public buildings is good.

**COLUMBUS**—Dr. I. Jackson, Whiteville. Four cases of typhoid fever. The sanitary condition of the county and public buildings good. Hog cholera prevails in some sections.

**CRAVEN**—Dr. L. Duffy, Newbern. No report.

**CUMBERLAND**—Dr. J. H. Marsh, Fayetteville. The sanitary condition of the county good, and that of the public buildings tolerably good.

**CURRITUCK**—No Board of Health.

**DARE**—No Board of Health.

**DAVIDSON**—Dr. R. L. Payne, Jr., Lexington. No epidemic has prevailed. The sanitary condition of the county is excellent; that of the public buildings not changed since last report.

**DAVIE**—No Board of Health.

**DUPLIN**—Dr. Jas. W. Blount, Kenansville. Whooping-cough, diphtheria, colds and influenza reported. The sanitary condition of the county is good; that of the public buildings good also—greatly improved in the last year or two—and the inmates are well and well cared for.

**DURHAM**—Dr. N. M. Johnson, Durham. Whooping-cough reported. Some malarial troubles over the country districts, but the sanitary condition seems to be very good, as is that of the public buildings.

EDGECOMBE—Dr. Donald Williams, Tarboro. There has been very little sickness of any kind. The public buildings are clean and well kept.

FORSYTH—Dr. D. N. Dalton, Winston. A few cases of typhoid fever reported. The sanitary condition of the county is good, so is that of the poor-house, and so will be, now, that of the jail.

FRANKLIN—Dr. E. L. Foster, Louisburg. Diphtheria (1) and typhoid fever (2) reported. No epidemic. Two or three cases of pneumonia. Sanitary condition of public buildings is good. There has been but one case of sickness in the jail of any consequence during the time of my incumbency as Superintendent of Health, dating from the first establishment of the Board of Health.

GASTON—Dr. J. H. Jenkins, Dallas. Previous failures to report have been owing to illness. Typhoid fever and pneumonia have prevailed in some parts of the county. The sanitary condition of county and public buildings good.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. Whooping-cough (fourteen cases reported) has prevailed in northern and western portions. One case of diphtheria (very doubtful), and three of typhoid fever. Sanitary condition of public buildings as good as they will admit of.

GREENE—Dr. E. H. Sugg, Snow Hill. Typho-malarial fever reported, but there has been less sickness for past two or three months than I ever knew before. Judge Whitaker, at Court last week, condemned the jail as not being comfortable in cold weather, so I guess the Commissioners will order a new one built.

GUILFORD—Dr. E. R. Michaux, Greensboro. Health of county remarkably good, a few cases of fever in a convalescing state, and very few new cases of any kind. Condition of public buildings good, except the jail. The needed improvements in the jail may be put on foot during the present sitting of the Superior Court.

HALIFAX—No Board of Health.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. Howell Way, Waynesville. The general health of the county exceptionally good, scarcely any sickness in any section. Three cases of typhoid fever reported.

HENDERSON—Dr. J. L. Egerton, Hendersonville. Ten cases of whooping-cough and two of typhoid fever. Sanitary condition very good.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. W. J. Hill, Statesville. Some cases of typhoid fever yet; very little pneumonia; tonsilitis right plentiful; some sporadic cholera. The jail is well kept. The almshouse is in good condition. One of the inmates of the latter, an old blind colored woman, while walking fell into a trench some six inches deep, and died in a few seconds. I made an autopsy and found a dislocation of the fifth cervical vertebra upon the sixth.

JACKSON—No Board of Health.

JOHNSTON—Dr. R. J. Noble, Smithfield. No sickness in the county. Public buildings in good sanitary condition.

JONES—No Board of Health.

LENOIR—Dr. C. B. Woodley, Kinston. There have been a few cases of remittent fever, one of measles, one of typhoid fever and one of pneumonia. I am unable to get reports from other doctors of the county. The jail is not in very good condition, and the Commissioners contemplate improving it at once.

LINCOLN—Dr. W. L. Crouse, Lincolnton. Four cases of whooping-cough and six of typhoid fever to report. The typhoid fever, with which this section has suffered, has about subsided. The public buildings are in fair sanitary condition, though the poor-house is at present too crowded.

MACON—Dr. J. M. Lyle has died, and Dr. S. H. Lyle has been elected to fill out the unexpired term as Superintendent of Health.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. Five cases of typhoid fever and two of hemorrhagic malarial fever reported. Sanitary con-

dition of county and public buildings very good.

McDOWELL—Dr. B. A. Cheek, Marion. There have been no new cases of typhoid fever, and there are no diseases to report.

MECKLENBURG—No Board of Health.

MITCHELL—Dr. C. E. Smith, Bakersville. No report.

MONTGOMERY—Dr. F. E. Asbury, Asbury. Influenza has prevailed in all parts of the county. The following diseases are also reported: Whooping-cough (10), scarlatina (13), diphtheria (5), typhoid fever (4), pernicious malarial (3) and hemorrhagic malarial (2) fevers. The sanitary condition of the poor-house is good; that of the jail not so good, but as good as that building will allow.

MOORE—Dr. Gilbert McLeod, Carthage. There have been a few cases of whooping-cough in the northern part of the county. The sanitary condition of the county is good; that of the public buildings good also, except that new buildings are needed at the home.

NASH—Dr. J. J. Mann, Nashville. Five cases of typhoid fever are reported. The sanitary condition of county is good; that of the public buildings very good indeed.

NEW HANOVER—Dr. F. W. Potter, Wilmington. Four cases of diphtheria and four of typhoid fever reported. The sanitary condition of the county and public buildings is good. There has been very little sickness. The floor of the jail has been repaired.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. Influenza and catarrhal fever have prevailed in all parts of the county. One case of diphtheria, three of typhoid fever and one of hemorrhagic fever reported. The condition of the jail is very good; that of the poor-house not very good. I have much trouble at the poor-house with the insane and idiots—accommodations entirely inadequate to treat them.

ONSLOW—Dr. E. L. Cox, Jacksonville. Two cases of diphtheria reported. The sanitary condition of the county is good. The jail has been without window panes, and the inmates suffered very much, but this is no longer the case.

ORANGE—Dr. D. C. Parris, Hillsboro. Catarrhal diseases have prevailed in mild form in all parts of the county. Some cases of whooping-cough and one case of typhoid fever reported. The sanitary condition of the county generally, the Mayor's office and court-house good, that of the jail not good, and that of the county home as good as can be with the present arrangement of buildings. Improvements in the distant future.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—No Superintendent of Health since the death of Dr. S. S. Satchwell.

PERQUIMANS—No Board of Health.

PERSON—No Board of Health.

PITT—Dr. B. T. Cox, Reddallia. There have been a few cases of malarial fever, bronchitis and whooping-cough, one each of pneumonia and hemorrhagic malarial fever, and two sporadic cases of *la grippe*. The sanitary condition of the public buildings is very good.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Ashboro. Health of the county remarkably good. Three cases of scarlatina and seven of typhoid fever reported. The sanitary condition of the public buildings good.

RICHMOND—Dr. J. M. Stansill, Rockingham. Four cases of whooping-cough and four of diphtheria reported. Other than this and catarrhal attacks there is very little sickness. The sanitary condition of the public buildings is good except the poor-house.

ROBESON—Dr. R. F. Lewis, Lumberton. Some scarlatina and whooping-cough reported. There has been an epidemic of cholera in swine.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerill, Salisbury. Typhoid fever has prevailed in Salisbury and some other parts of the county, four cases reported. The sanitary condition of the county is unchanged—general good health seems to prevail—no great mortality. The county is free of epidemics. There have been several

cases of severe stomatitis. The public buildings are in good condition. The fence around the court-house and jail not begun as yet.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. Whooping-cough has prevailed in all parts of the county, and three cases of typhoid fever are reported. The sanitary condition of the county very good, also that of the public buildings considering the poor construction of some of them.

SAMPSON—Dr. John A. Stevens, Clinton. Some whooping-cough and a few cases of typhoid and malarial fevers. Colds and sore throats very common. Two cases of pneumonia. No reports from other physicians. It appears that there will have to be some law to pay or compel them to report. I certainly know that asking will not do it. The sanitary condition of the poor-house is good.

STANLY—Dr. A. C. Bayles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Six cases of diphtheria and twelve of typhoid fever reported. The general sanitary condition of the county and public buildings is good.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. There has been no sickness to amount to anything. The public buildings are in a bad sanitary condition and no steps are being taken to improve them.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander, Columbia. No report.

UNION—Dr. W. C. Ramsay, Monroe. No report.

VANCE—Dr. A. Cheatham, Henderson. The general health of the county better than ever known. The sanitary condition of the public buildings is good.

WAKE—Dr. James McKee, Raleigh. No epidemic has prevailed. Two cases of diphtheria reported. The sanitary condition of the county and public buildings is good.

WARREN—Dr. P. J. Macon, Warrenton. No report.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Council, Boone. No disease of any kind has prevailed in the county. The sanitary condition of the public buildings is good. Dr. Council hears of but one death in the county for November, from old age.

WAYNE—Dr. John Spicer, Goldsboro. No report.

WILKES—No Board of Health.

WILSON—Dr. Albert Anderson, Wilson. Pleurisy, pneumonia and malarial fever have prevailed in all parts of the county. Typhoid fever, pernicious malarial fever and cholera-infantum also reported. The sanitary condition of the county is fair and that of the public buildings is good.

YADKIN—Dr. T. R. Harding, Yadkinville. No report.

YANCEY—Dr. J. L. Ray, Burnsville. A little whooping-cough and one case of typhoid fever are reported. The health of the county is better than usual. The poor-house is in very good condition and very well kept, but the jail is very filthy, owing to the neglect of the jailer.

#### *Review of Diseases for November, 1892.*

(Fifty-two counties reporting.)

BRONCHITIS—From Caldwell and Pitt.

CATARRHAL DISEASES—From Orange and Northampton.

CHOLERA, IN HOGS—From Robeson.

CHOLERA, SPORADIC—From Iredell.

CHOLERA-INFANTUM—From Duplin and Wilson.

DIPHTHERIA—From Alamance, Duplin, Franklin, Montgomery, New Hanover, Northampton, Onslow, Stokes and Wake.

INFLUENZA—From Caldwell, Duplin, Montgomery, Northampton, Pitt and Wilson.

MALARIAL FEVER—From Durham, Lenoir, Pitt and Wilson.

MALARIAL FEVER, HEMORRHAGIC—From Martin, Montgomery, Northampton and Pitt.

MALARIAL FEVER, PERNICIOUS—From Montgomery and Wilson.

MALARIAL FEVER, TYPHO—From Greene,  
PNEUMONIA—From Alamance, Caldwell,  
Gaston, Iredell, Lenoir and Pitt.

SCARLATINA—From Montgomery and Randolph.

TYPHOID FEVER—From Burke, Caldwell,  
Catawba, Columbus, Forsyth, Franklin, Gaston,  
Granville, Haywood, Henderson, Iredell,  
Lenoir, Lincoln, Martin, Montgomery, Nash,  
New Hanover, Northampton, Randolph,  
Rowan, Rutherford, Sampson, Wilson and  
Yancey—24 counties; the cases generally few.

WHOOPING-COUGH—From Alamance, Catawba,  
Duplin, Granville, Henderson, Lincoln,  
Montgomery, Moore, Orange, Pitt, Richmond,  
Robeson, Rutherford, Sampson and Yancey—  
15 counties.

*Summary of Mortuary Reports for November,  
1892.*

(TWENTY-THREE TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population.	67,865	49,749	117,614
Aggregate deaths.....	74	87	161
Representing annual			
death-rate per 1,000			
excluding still-births,	13.1	16.0	14.2
<i>Causes of death.</i>			
Typhoid fever.....	5	5	10
Malarial fever.....	1	1	2
Diphtheria.....	1	0	1
Pneumonia .....	9	4	13
Consumption .....	12	12	24
Brain diseases.....	4	6	10
Heart diseases.....	6	4	10
Neurotic diseases....	3	5	8
Diarrhoeal diseases...	3	3	6
All other diseases....	21	29	50
Accident .....	1	4	5
Still-born.....	8	14	22
	74	87	161

*Condition of Jails and Poor-houses by Counties for November, 1892.*

COUNTIES.	JAIL.					POOR-HOUSE AND HOUSE OF CORRECTION.				
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.		
Alamance.....	12 (a)				31					
Alexander.....										
Alleghany.....										
Anson.....										
Ashe.....										
Beaufort.....										
Bertie.....										
Bladen.....										
Brunswick.....										
Buncombe.....	43 (b)				21					
Burke.....	2				4					
Cabarrus.....										
Caldwell.....	4	*	0	4	8	*	3	3		
Camden.....										
Carteret.....	2	*	1	2	0					
Caswell.....	2	500			22	1,000	8	3		
Catawba.....	5		2	4	22		9	12		
Chatham.....	5				22					
Cherokee.....	3				2					
Chowan.....										
Clay.....										
Cleveland.....	12			7	18	997		3		
Columbus.....	9	*		5	12	*		0		
Craven.....										
Cumberland.....						15				
Currituck.....										
Dare.....										
Davidson.....	9	*	0	4	23	720	0	2		
Davie.....										
Duplin.....	1	*			8	*				
Durham.....	25 (c)	1,000		6	14	1,000		2		
Edgecombe.....	14	*	3	4	22	*	2	5		
Forsyth.....	35	800	16	10	24	*	8	4		

(a) Includes 9 in house of correction. (b) Includes 33 in house of correction. (c) Includes 18 in house of correction. \* Space exceeds one thousand feet.

*Condition of Jails and Poor-houses by Counties for November, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin.....	6	*			21	*		
Gaston.....								
Gates.....								
Graham.....								
Granville.....	*	15 (a)	*	4	25	*		9
Greene.....	6	500	2		11	1,000		1
Guilford.....	24	520			35	*		
Halifax.....								
Harnett.....								
Haywood.....	2			2				
Henderson.....	1				2			
Hertford.....								
Hyde.....								
Iredell.....	12				20			
Jackson.....								
Johnston.....	4	1,000			10	*		
Jones.....								
Lenoir.....	3	*		1				
Lincoln.....	7	*	2	4	25	400		10
McDowell.....	2		0	1	11		0	0
Macon.....								
Madison.....								
Martin.....	1		0	0	10	1,000	3	3
Mecklenburg.....								
Mitchell.....								
Montgomery.....	3		2	0	14		4	2
Moore.....	4	*	0	1	7	*	2	3
Nash.....	6	600	3	4	24	1,000	4	3
New Hanover.....	31 (b)	700	16	17	16	1,000	10	9
Northampton.....	7	750	3	2	30	800		8
Onslow.....	1	*		1	3	*	1	1
Orange.....	3	1,000	1	1	16	*	8	4
Pamlico.....								

(a) Includes 8 in house of correction. (b) Includes 11 in house of correction. \* Space exceeds one thousand feet.

*Condition of Jails and Poor-houses by Counties for November, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....								
Perquimans .....								
Person.....								
Pitt.....					18			
Polk .....								
Randolph.....	7				28			
Richmond.....	12		3	3	10		1	1
Robeson.....	5	*			8	900		
Rockingham.....								
Rowan.....	16 (a)	*		1	16	*	3	1
Rutherford.....	7	800			22	*		
Sampson.....					21			
Stanly.....								
Stokes.....	4	500	2	2	13	400	4	3
Surry .....								
Swain.....								
Transylvania.....								
Tyrrell.....								
Union.....								
Vance.....	4	*			15	*		
Wake.....	66 (b)	*			73	*		
Warren.....								
Washington.....								
Watanga.....								
Wayne.....								
Wilkes.....								
Wilson .....	2	*	0	2	22	*	4	6
Yadkin.....								
Yancey .....	3	768	1	2	1	*		

(a) Includes 13 on public roads. (b) Includes 51 in house of correction and on the public roads.

\* Space exceeds one thousand feet.

*Mortuary Report for November, 1892.*

**Meteorological Summary for North Carolina, November, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, Ph. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).								NO. OF DAYS					Prevailing Wind.	
	Monthly Mean.	Highest Date.	Mean Maximum.	Lowest Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Humidity.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.		
Bakersville .....	49.5	67	2	53.6	8	25	27.4	50	26.2	.....	4.85	10	9	11	11 W.
Charlotte .....	48.8	79	3	58.6	20	24	39.0	59	19.6	67.0	2.99	16	7	7	10 N.W.
Chapel Hill .....	47.1	81	2	59.3	19	24	34.9	62	24.4	.....	4.35	.....	.....	.....	10 .....
Douglas .....	42.8	76	2	59.4	10	24	26.2	66	33.2	.....	3.69	.....	.....	5	.....
Goldsboro .....	49.4	78	2	60.5	20	25	38.3	58	22.2	.....	4.85	.....	.....	7	.....
Greensboro .....	48.1	72	3	56.0	22	24	40.2	50	15.8	.....	4.26	.....	.....	8	.....
Horse Cove .....	43.9	63	1	52.3	11	21	35.6	52	16.7	.....	7.03	10	4	10	8 N.W.
Kitty Hawk .....	50.1	76	2	53.8	24	24	43.4	52	13.4	77.6	3.93	11	7	9	11 N.W.
Littleton .....	47.0	78	2	50.1	21	24	35.0	57	24.1	.....	2.38	12	3	15	12 .....
Lumberton .....	51.0	82	3	61.3	16	25	37.6	66	26.7	.....	4.93	.....	.....	5	.....
Lenoir .....	43.4	67	4	51.5	15	25	35.9	52	15.8	.....	3.30	.....	.....	5	.....
Morganton .....	45.8	80	2	59.2	14	25	36.3	66	22.9	77.3	3.77	.....	.....	6	.....
Mount Airy .....	43.4	70	4	54.3	13	25	32.5	57	21.8	.....	4.89	16	4	10	7 N.W.
Oak Ridge .....	46.1	75	2	56.6	16	25	35.6	59	21.0	.....	4.78	17	1	12	10 N.W.
Pittsboro .....	44.6	75	2	51.3	14	25	31.9	61	19.4	.....	2.40	16	8	6	6 N. E.
Raleigh .....	47.9	79	2	57.4	20	24	38.7	59	18.4	74.4	2.92	13	8	9	10 N.W.
Southport .....	52.6	75	21	61.5	22	25	43.8	53	17.7	.....	1.56	18	7	5	7 N.
Southern Pines .....	45.1	82	3	61.2	13	24	31.0	49	30.2	.....	2.80	16	5	9	5 S. W.
Salisbury .....	49.0	72	2	55.2	21	24	40.7	51	15.5	.....	4.00	.....	.....	9	.....
Weldon .....	47.5	78	2	58.7	19	25	36.3	59	22.4	.....	3.58	14	2	14	8 W.
Washington .....	51.3	83	2	62.2	14	24	.....	69	.....	.....	2.97	15	9	6	9 N.W.
Wilmington .....	52.8	81	3	62.1	25	25	43.9	56	18.2	76.0	0.59	16	8	6	5 N.W.

## STATE METEOROLOGICAL SUMMARY FOR NOVEMBER, 1892.

Mean Barometer 30.15 inches; normal for November, 30.13.

Highest Barometer 30.43 inches, on the 10th, at Chattanooga, Tenn.

Lowest Barometer 29.65 inches, on the 18th, at Lynchburg, Va.

Mean temperature 47.1 degrees; normal for November, 49.7 degrees.

Highest temperature 81, on the 3d, at Rockingham.

Lowest temperature 8, on the 25th, at Bakersville.

Average rain-fall, 3.47 inches; normal for November, 3.40 inches.

Greatest monthly rain-fall, 7.03 inches, at Horse Cove.

Least monthly rain-fall 0.59 inches at Wilmington.

Average number of cloudless days, 14,

Average number of partly cloudy days, 7.

Average number of cloudy days, 9.

Average number of rainy days, 8.

Prevailing wind direction, north-east; average velocity, 8.8 miles per hour. Prevailing direction from many years' observations, north-east. Average hourly velocity, 7.5 miles.

# BULLETIN

OF THE

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RICHARD H. LEWIS, M. D., *Secretary and Treasurer*, Raleigh.

Entered at the post-office at Raleigh, N. C., as third-class mail matter.

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JANUARY, 1893.

NO. 10.

## *Quarantine Defenses and Cholera.*

There is good reason to hope that what has been learned as to the *principal* causes and conditions of cholera epidemics in Western countries, and the means available for their exclusion or restraint, may continue to prove sufficient, if thoroughly put in practice, to prevent a repetition of the de-olating scourge of former times, in such countries as England and the United States. There is much to be done, in legislation, appropriation, and organization, before next spring, in order to insure even this degree of success.

In the tight little island that we call the mother country, it may be practicable, with the liberal pecuniary support afforded to the sanitary administration to cope with cases of cholera in detail, through strict isolation and disinfection, so that though cases may be imported, an epidemic cannot. This is internal quarantine. Whether it may not sometime need to be strengthened by the outworks of external quarantine, even in Britain, will depend on the magnitude of infected immigration or travel, which might, conceivably, be such as to swamp the best sanitary administration practicable.

Our cousins are just now rather triumphant over their success; although the *Lancet* admits that the present brief period of observation of immigrants is not sufficient for safety, (and what would it be worth for a fourfold or tenfold influx?) in the same breath insisting that no external quarantine is necessary, to repel an invasion of cholera.

With regard to our own immense country, and vast immigration, at least, there is no room for sane dissent from the demand for efficient national quarantine at every port and station on our borders, backed within by such energetic domestic quarantine, at all points, as the New York City Board of Health has carried out during the recent alarm. Both these grand reforms have received a beneficent impulse from the late threatening demonstration. Dr. Collingridge, of London, is reported in one of the papers to have said: "In fact, the cholera is the best thing that can happen to us. If we did not get a scare about once in three years, our sanitation would get neglected. Cholera passed our first great Public Health Act. It formed our port sanitary regulations and authority. These acts have saved more human lives than ever cholera destroyed since the world began."

The average man is usually a mere *routinier*, in whatever profession; and, like any other wheel, once in a rut, will run in it forever, unless bodily hoisted out. From this cause, we may long continue to hear, as we do now, about "the period of incubation," as a measure for quarantine; one of these jump generalizations, from ordinary but not always so much as from uniform observation, that get currency from some Sir Oracle, and never die but with the whole generation that receives them. It is sufficient, concerning this rule, to recall that passengers of the Moravia, after passing without sickness through her twelve days passage and eighteen days in port—thirty days in all—sickened and died of cholera on Swinburne Island, in spite of the most perfect disinfection and isolation from all sources of infection. It is hard to conjecture an explanation of these cases, on the basis of the current theory. The persistence of the useless copperas in public prescriptions for disinfection, is also accounted for by the wheel-and-crank principle.

#### IN PERSONAL PROPHYLAXIS.

We notice a plausible and possibly important suggestion to the effect that so far as danger from the drinking-water is concerned, it is advisable to drink none on an empty stomach. The acid of the gastric juice being the great internal germinicide for cholera, and being elicited only by the entrance of food and not of water; a little food, if only milk or fruit, &c., should always precede a draught of water, unless a meal has been recently taken.

The boiling of water, which many have commenced under the late beneficent impulse from pestilence, they will do well to continue, irrespective of special perils. For the evidence is convincing, that the vegetable contamination, more or less acquired by all sorts of waters, is an effective malarial poison, and even unnoticed measures may be the cause of "that tired feeling" and of other common though slight symptoms of a depressing malarial influence, which it is well worth while to avoid.

The surprising exemption of the Chinese from extreme zymotic mortality that might be expected from the filthiness of their water sup-

plies, is accounted for by the fact that they never drink the water, except boiled and *tannized* as tea — *The Sanitary Era*.

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#### Summary of Mortuary Reports for December, 1892.

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**ALAMANCE**—Dr. G. W. Long, Graham. Whooping-cough and pneumonia prevail. The towns, and some sections of the country, must wake up on sanitary questions. The condition of the public buildings is fair, except the jail, and that is in as good a state as the old building will permit.

**ALEXANDER**—Dr. R. B. Kilhan, Taylorsville. No diseases reported. No epidemic. The sanitary condition of the public buildings is good. There has been improvement at the poor-house—a new building has been added.

**ALLEGHANY**—No Board of Health.

**ANSON**—Dr. E. F. Ashe, Wadesboro. No report.

**BEAUFORT**—Dr. S. T. Nicholson, Washington. No report.

**BERTIE**—No Board of Health.

**BLADEN**—Dr. N. Robinson, Elizabethtown. No report.

**BRUNSWICK**—No Board of Health.

**BUNCOMBE**—Dr. C. E. Hilliard, Asheville. No special disease has prevailed. It seems impossible to get physicians to report cases occurring in their practice. The sanitary condition of the public buildings is good, with the exception of the jail. This is due to freezing of water pipes, &c., which will be corrected as soon as possible.

**BURKE**—Dr. J. L. Laxton, Morganton. Little or no sickness for December. One case of dysentery reported. Some colds and coughs, but nothing serious. There is an epidemic of chicken cholera in some sections. The sanitary condition of the public buildings is as good as such buildings will permit.

**CABARRUS**—No Board of Health.

**CALDWELL**—Dr. A. A. Kent, Lenoir. Health of county unusually good. A few cases of

bronchitis and pneumonia, and two of typhoid fever reported.

CAMDEN—No Board of Health.

CARTERET—Dr. M. F. Arendell, Morehead City. No diseases to report. The public buildings are in usually clean and good condition.

CASWELL—Dr. R. H. Williams, Yanceyville. No report.

CATAWBA—Dr. Geo. H. West, Newton. Two cases of whooping-cough and seven of typhoid fever reported. Influenza has prevailed in some parts of the county. The jail has been repaired, and the sewerage is as good as the surroundings will admit of.

CHATHAM—Dr. H. T. Chapin, Pittsboro. Little sickness of any kind. The public buildings are in good condition.

CHEROKEE—Dr. J. F. Abernathy, Murphy. There is some fever in this county, three or four cases of pneumonia, and ten or twelve of typhoid fever in this immediate vicinity. The condition of the public buildings is very good, buildings and surroundings neat and clean, inmates healthy.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. There are several cases of typhoid fever in the county. The sanitary condition of the public buildings is very good. We have a new jail with all the modern improvements.

COLUMBUS—Dr. I. Jackson, Whiteville. Three cases of typhoid fever reported, and two or three of pneumonia. No reports from other physicians. The sanitary condition of public buildings is good.

RAVEN—Dr. L. Duffy, Newbern. No report.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. The sanitary condition of the county and public buildings is good.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. No reports from other physicians. I hear of scattered cases of chicken-pox. The sani-

tary condition of county and public buildings is good. During the past month the jail sewer has been opened up, and now works very well.

DUPLIN—Dr. James W. Blount, Kenansville. There are a few cases of pneumonia and whooping-cough in some sections. There has been an epidemic of hog-cholera. The sanitary condition of the county and public buildings is very good. I am pleased to report that the county authorities have somewhat awakened to the importance of providing for the sanitation of the buildings, etc.

DURHAM—Dr. N. M. Johnson, Durham. Whooping-cough has prevailed in some parts of the county. Most of our troubles now are pneumonia and other diseases resulting from cold and bad weather. The sanitary condition of the public buildings is very good, except the jail. The sewerage from this has been frozen and had to be torn up, but will be put in good shape as soon as possible.

EDGECOMBE—Dr. Donald Williams, Tarboro. Five cases of measles and a few of typho-malarial fever reported. The sanitary condition of the jail and poor-house is very good.

FORSYTH—Dr. D. N. Dalton, Winston. A few cases of whooping-cough reported. The sanitary condition of the county and public buildings is good.

FRANKLIN—Dr. E. L. Foster, Louisburg. Four cases of typhoid fever reported. Otherwise there is little sickness. The sanitary condition of the public buildings is very good.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. No diseases to report. So far as reported by our doctors, the sanitary condition of the county is fair among the whites, but bad among the colored. The sanitary condition of the public buildings is unchanged. The work-house is not sufficiently heated in cold weather.

GREENE—Dr. E. H. Sugg, Snow Hill. Malarial fever has prevailed. A few cases of typhoid fever and of pneumonia reported.

There was less sickness during 1892 than for several years. The sanitary condition of the public buildings is good.

**GUILFORD**—Dr. E. R. Michaux, Greensboro. Health of town and county remarkably good. There have been some parotitis, colds, and coughs. The public buildings are in very good sanitary condition. However, our jail remains the same, and nothing short of a new building could fully remedy the trouble.

**HALIFAX**—Dr. J. E. Green, of Weldon, has been elected County Superintendent, and will report hereafter.

**HARNETT**—No Board of Health.

**HAYWOOD**—Dr. J. Howell Way, Waynesville. Some cases of erysipelas in Clyde township; otherwise scarcely any sickness in the county. Hog cholera in some sections. We hope the present Legislature will authorize the building of a new jail. The county home is about ten miles out of town in an out-of-the-way corner. The only direct approach to it is said to be by sled. It ought to be near the town. I hope we shall at no distant day have a public sentiment that will demand this.

**HENDERSON**—Dr. J. L. Egerton, Hendersonville. Influenza and whooping-cough (five cases reported) have prevailed in some sections.

**HERTFORD**—No Board of Health.

**HYDE**—No Board of Health.

**IREDELL**—Dr. W. J. Hill, Statesville. Three cases of typhoid fever and one of pernicious malarial fever reported. The county generally is in good sanitary condition, but in portions there are swamps which cannot be drained. They produce more or less malarial troubles. The poor-house is in good condition—good drainage, plenty of sunshine and fresh air. The jail is in its usual good order. The prisoners have fires and warm bedding.

**JACKSON**—No Board of Health.

**JOHNSTON**—Dr. R. J. Noble, Smithfield. The county has been remarkably healthy. No diseases to report. The sanitary condition of the public buildings is excellent.

**JONES**—No Board of Health.

**LENOIR**—Dr. C. B. Woodley, Kinston.

There is some bronchitis and several cases of chicken-pox. The condition of the jail is not very good, though the County Commissioners say they are going to improve it.

**LINCOLN**—Dr. W. L. Crouse, Lincolnton. Six cases of typhoid fever reported. Colds and pneumonia have prevailed in all parts of the county. There has been an epidemic of hog-cholera in a small section. No sickness in the public institutions since early in the summer.

**MACON**—Dr. S. H. Lyle, Franklin. Health of county better than for the year preceding. No typhoid and but little pneumonia. We have had another epidemic of influenza, mostly in the nervous form; when in the catarrhal form it nearly always terminates in bronchial catarrh.

**MADISON**—No Board of Health.

**MARTIN**—Dr. W. H. Harrell, Williamston. Five cases of typhoid fever reported. Bronchitis and dysentery have prevailed in several parts of the county. The sanitary condition of the county and public buildings is good.

**MCDOWELL**—Dr. B. A. Cheek, Marion. Two cases of typhoid fever. Catarrhal troubles have prevailed. The sanitary condition of county and public buildings is good.

**MECKLENBURG**—No Board of Health.

**MONTGOMERY**—Dr. E. F. Asbury, Asbury. Ten cases of measles, fifteen of whooping-cough, two of scarlatina, four of diphtheria and two of pernicious malarial fever. Influenza has prevailed in all parts of the county. The sanitary condition is good at the poor-house, and as good at the jail as could be expected for a shabby house of that kind.

**MOORE**—Dr. Gilbert McLeod, Carthage. No report.

**NASH**—Dr. J. J. Mann, Nashville. No report.

**NEW HANOVER**—Dr. F. W. Potter, Wilmington. One case of measles and one of pernicious malarial fever. *La Grippe* has prevailed in some parts of the county. There are some catarrhal troubles due to the very cold weather, mercury as low as 18° F; 14° below

freezing is unusual. The sanitary condition of the county and public buildings is good. One death at the home during the month from softening of the brain.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. Two cases of diphtheria and one of typhoid fever. Influenza has prevailed in all parts of the county. The sanitary condition of the county as good as usual at this season; of the jail, excellent; of the poor-house, bad; of the other public buildings, poor.

ONSLOW—Dr. E. L. Cox, Jacksonville. No report.

ORANGE—Dr. D. C. Parris, Hillsboro. No diseases dangerous to public health. There have been some cases of remittent fever and catarrhal diseases and throat affections have been prevalent. The sanitary condition of the county not very good; of the jail, not good, and of the other public buildings fairly good.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—No Superintendent of Health since the death of Dr. Satchwell.

PERQUIMANS—No Board of Health.

PERSON—No Board of Health.

PITT—Dr. B. T. Cox, Redallia. Health good, only a few cases of *La Grippe* and one of eczema reported. The sanitary condition of the public buildings is not as good as it ought to be. Some of the buildings at the Home of the Aged and Infirm are too open, never having been ceiled or plastered.

POLK—No Board of Health.

RANDOLPH—Dr. J. Middleton Boyette, Ashboro. Five cases of whooping-cough and four of typhoid fever and one of puerperal fever reported. Influenza and pneumonia have prevailed. No more scarlatina. The sanitary condition of the county and public buildings is good.

RICHMOND—Dr. J. M. Stansill. Very little sickness in the county. Two cases of whooping-cough, one of diphtheria and one of typhoid fever reported. The sanitary condition of the public buildings is good, except the poor-house. I am glad to say that the County Commissioners

are preparing to buy another place and erect new buildings.

ROBESON—Dr. R. F. Lewis, Lumberton. There has been little sickness, but some whooping-cough, scarlatina and diphtheria. The court-house is in excellent condition. The jail is not properly ventilated. Plans are on foot for building a better poor-house.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. No diseases dangerous to the public health, except perhaps a few cases of typhoid fever. We have had mild catarrhal affections and jaundice. The public buildings are in good condition—the prisoners and poor well cared for.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. Health good—no diseases to report. The sanitary condition of the public buildings is as good as the faulty construction will admit of.

SAMPSON—Dr. John A. Stevens, Clinton. Pneumonia, pleurisy, bronchitis and tonsilitis, with a few cases of influenza. No report from other physicians. There has been an epidemic of hog-cholera. We have no jail. The poor-house is in good condition.

STANLY—Dr. A. C. Bayles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Four cases of diphtheria and six of typhoid fever. The sanitary condition of the county and public buildings is good.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. No sickness of any kind. The public buildings are in a bad sanitary condition, and there are no efforts at improvement.

TRANSYLVANIA—No Board of Health.

TYRELL—Dr. A. C. Alexander, Columbia. No report.

UNION—Dr. W. C. Ramsey, Monroe. No report.

VANCE—Dr. A. Cheatham, Henderson. Nothing said as to diseases.

WAKE—Dr. James McKee, Raleigh. One

case of scarlatina and one of typhoid fever reported. The sanitary condition of the county and public buildings is good.

**WARREN**—Dr. P. J. Macon, Warrenton. The physicians do not report. There has been some rheumatism, neuralgia and pneumonia. The diet of the inmates of the public buildings is inspected frequently and changed often. The inmates of the home are well clad with woolen goods and heavy shoes. The rooms are well ventilated and heated by open fireplaces and oak wood. The jail is heated by wood stoves.

**WASHINGTON**—No Board of Health.

**WATAUGA**—Dr. W. B. Council. No report.

**WAYNE**—Dr. John Spicer, Goldsboro. No diseases dangerous to public health. There has been some pneumonia. The sanitary condition of the county and public buildings is good.

**WILKES**—No Board of Health.

**WILSON**—Dr. Albert Anderson, Wilson. Dysentery, pneumonia and intermittent fever have been reported in different parts of the county. The sanitary condition of the county and public buildings is good.

**YADKIN**—Dr. J. R. Harding, Yadkinville. No report.

**YANCEY**—Dr. J. L. Ray, Burnsville. Two cases of typhoid fever reported. Whooping-cough has prevailed in some parts of the county. The health of the people is better than usual at this time of the year. The jail is filthy on account of neglect. The poor-house is in very good condition.

#### *Review of Diseases for December, 1892.*

**BRONCHITIS**—From Caldwell, Lenoir, Martin and Sampson.

**CATARRHAL DISEASES**—From Burke, Guilford, McDowell and Orange.

**CHICKEN-POX**—From Davidson and Lenoir.

**CHOLERA, IN HOGS**—From Duplin, Haywood, Lincoln and Sampson.

**CHOLERA, IN CHICKENS**—From Burke.

**DIPHTHERIA**—From Montgomery, Northampton, Richmond, Stokes and Wake.

**DYSENTERY**—From Martin and Wilson.

**INFLUENZA**—From Catawba, Henderson, Macon, Montgomery, New Hanover, Northampton, Pitt, Randolph and Sampson—9 counties.

**ERYSIPelas**—From Haywood.

**MALARIAL FEVER**—From Greene, Orange and Wilson.

**MALARIAL FEVER, PERNICIOUS**—From Montgomery and New Hanover.

**MALARIAL FEVER, TYPHO**—From Edgecombe.

**MEASLES**—From Edgecombe, Montgomery and New Hanover.

**MUMPS**—From Guilford.

**PNEUMONIA**—From Alamance, Caldwell, Cherokee, Columbus, Duplin, Durham, Greene, Lincoln, Macon, Randolph, Sampson, Warren, Wayne and Wilson—14 counties.

**PUERPERAL FEVER**—From Randolph.

**SCARLATINA**—From Montgomery, Robeson and Wake.

**TYPHOID FEVER**—From Caldwell, Catawba, Cherokee, Cleveland, Franklin, Greene, Iredell, Lincoln, McDowell, Martin, Northampton, Randolph, Richmond, Rowan, Stokes and Yancey—16 counties.

**WHOOPING-COUGH**—From Alamance, Catawba, Duplin, Forsyth, Montgomery, Randolph, Richmond, Robeson and Vancey—9 counties.

#### *Summary of Mortuary Reports for December, 1892.*

(TWENTY-THREE TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population.	70,865	50,349	121,214
Aggregate deaths.....	60	75	135
Representing annual death-rate per 1,000,	10.2	17.9	13.4
<i>Causes of death.</i>			
Typhoid fever.....	1	2	3
Malarial fever.....	2	1	3
Whooping-cough .....	1	0	1
Pneumonia .....	5	8	16
Consumption .....	5	11	16
Brain diseases.....	4	3	7
Heart diseases.....	3	9	12
Neurotic diseases....	1	0	1
Diarrhoeal diseases...	1	2	3
All other diseases ...	26	30	56
Accident and Violence	0	5	5
Still-born.....	7	4	11
	59	75	134

*Condition of Jails and Poor-houses by Counties for December, 1892.*

COUNTIES.	JAIL.				POOR-HOUSE AND HOUSE OF CORRECTION.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....								
Alexander.....	2	*			10	*		
Alleghany.....								
Anson.....								
Ashe.....								
Beaufort.....								
Bertie.....								
Bladen.....								
Brunswick.....								
Buncombe.....	47 (a)				25			
Burke.....	2			1	6			2
Cabarrus.....								
Caldwell.....	5	*	0	4	8	*	3	3
Camden.....								
Carteret.....	2	*	1	1	0			
Caswell.....								
Catawba.....	7	*	3		22	*	9	
Chatham.....	8				21			
Cherokee.....	3	*			2	*		
Chowan.....								
Clay.....								
Cleveland .....	30			8	22	907		4
Columbus.....	13	*		6	12	*		0
Craven.....								
Cumberland.....	16				15			
Currituck.....								
Dare.....								
Davidson .....	12	*	0	4	26	720	0	2
Davie .....								
Duplin.....	2				6			
Durham.....	31 (b)	700		8	10	*		3
Edgecombe.....	14	*	4	3	22	*	5	2
Forsyth .....	25	1,000	15	8	28	*	10	4

\* Space exceeds one thousand feet. (a) Includes 30 in house of correction. (b) Includes 10 in house of correction.

*Condition of Jails and Poor-houses by Counties for December, 1892.—Continued.*

COUNTIES.	JAIL.				POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	8	*	.....	.....	21	*	.....	.....
Gaston .....	.....	.....	.....	.....	.....	.....	.....	.....
Gates .....	.....	.....	.....	.....	.....	.....	.....	.....
Graham .....	.....	.....	.....	.....	.....	.....	.....	.....
Granville.....	14 (a)	*	3	9	26	*	9	11
Greene.....	.....	500	.....	.....	11	1,000	.....	1
Guilford.....	18	693	.....	.....	31	*	.....	.....
Halifax.....	.....	.....	.....	.....	.....	.....	.....	.....
Harnett.....	.....	.....	.....	.....	.....	.....	.....	.....
Haywood.....	2	.....	0	2	.....	.....	.....	.....
Henderson .....	2	.....	.....	.....	2	.....	.....	.....
Hertford.....	.....	.....	.....	.....	.....	.....	.....	.....
Hyde.....	.....	.....	.....	.....	.....	.....	.....	.....
Iredell.....	13	.....	.....	.....	20	.....	.....	.....
Jackson.....	.....	.....	.....	.....	.....	.....	.....	.....
Johnston.....	9	1,000	.....	4	10	*	.....	0
Jones.....	.....	.....	.....	.....	.....	.....	.....	.....
Lenoir.....	4	*	.....	.....	.....	.....	.....	.....
Lincoln.....	7	.....	.....	4	23	.....	.....	6
McDowell.....	5	.....	0	.....	11	.....	0	.....
Macon.....	2	.....	.....	.....	.....	.....	.....	.....
Madison.....	.....	.....	.....	.....	.....	.....	.....	.....
Martin.....	0	.....	.....	.....	9	1,000	3	3
Mecklenburg.....	.....	.....	.....	.....	.....	.....	.....	.....
Mitchell.....	.....	.....	.....	.....	.....	.....	.....	.....
Montgomery.....	5	.....	1	.....	14	.....	4	.....
Moore.....	.....	.....	.....	.....	.....	.....	.....	.....
Nash.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hanover.....	27 (b)	600	16	18	14	1,000	10	10
Northampton.....	.....	.....	.....	.....	.....	.....	.....	.....
Onslow.....	.....	.....	.....	.....	.....	.....	.....	.....
Orange.....	6	.....	4	0	16	.....	5	9
Pamlico.....	.....	.....	.....	.....	.....	.....	.....	.....

\* Space exceeds one thousand feet. (a) All in house of correction. (b) Includes 9 in house of correction.

*Condition of Jails and Poor-houses by Counties for December, 1892.—Continued.*

COUNTIES.	JAIL.					POOR-HOUSE.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number lumates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	
Pasquotank.....									
Pender.....									
Perquimans.....									
Person.....									
Blk.....					17				
Polk.....									
Randolph.....	8				29				
Richmond.....	14		4	4	12		1	2	
Robeson.....	13 (a)	*			7	*			
Rockingham.....									
Rowan.....	12	625	0	2	19	*	0	1	
Rutherford.....	6	*			22	*			
Sampson.....					22				
Stanly.....									
Stokes.....	6	500	2	3	13	400	4	2	
Surry.....									
Swain.....									
Transylvania.....									
Tyrrell.....									
Union.....									
Vance.....	4	*			17	*			
Wake.....	68 (b)	*			73	*			
Warren.....	4	*	2	3	16	*	8	2	
Washington.....									
Watauga.....									
Wayne.....	19	952			7	*			
Wilkes.....									
Wilson.....	4	*	0	2	23	*	5	6	
Yadkin.....									
Yancey.....	1	*	1	1	1	*			

\* Space exceeds one thousand feet. (a) Includes 9 in house of correction. (b) Includes 45 in house of correction.

*Mortuary Report for December, 1892.*

**Meteorological Summary for North Carolina, December, 1892.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.

H. B. BATTLE, PH. D., Director.

C. F. VON HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).								NO. OF DAYS				Prevailing Wind.	
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Total Precipitation.	Cloudless.	Partly Cloudy.	Cloudy.	Rainy.	
Asheville .....	37.2	69	6	48.3	4	28	26.0	65	22.3	1.60	11	13	7	9
Columbus.....	39.2	64	14	46.3	18	28	32.2	46	14.1	1.59	20	4	7	4 N.
Charlotte .....	42.1	69	7	50.5	18	27	33.7	51	16.8	2.68	15	8	8	10 N. E.
Chapel Hill .....	39.1	68	7	50.6	6	28	27.6	62	23.0	2.77	.....	.....	7	.....
Douglas .....	37.2	69	8	53.2	1	29	21.1	68	32.1	3.21	14	10	7	5 W.
Highlands.....	35.7	58	14	43.5	12	29	31.8	46	14.7	.....	15	4	12	..... N.W.
Horse Cove.....	40.1	64	14	47.5	16	29	32.7	48	14.8	2.85	12	10	9	S. W.
Littleton .....	38.0	68	8	47.8	7	28	28.3	61	19.5	3.43	.....	.....	7	.....
Lenoir .....	37.7	65	7	46.1	10	29	29.7	55	16.4	1.50	.....	.....	5	.....
Louisburg.....	36.4	67	8	46.1	2	29	26.6	65	19.5	3.52	15	5	11	7 N.W.
Marion.....	39.4	69	4	52.4	12	28	26.5	57	25.9	0.76	23	.....	8	4
Mount Pleasant.....	40.6	68	4	52.2	6	29	29.1	62	23.1	2.78	11	10	10	S. W.
Mount Airy.....	37.4	67	7	48.5	10	29	26.2	57	22.3	1.52	15	9	7	S. W.
Oak Ridge .....	38.8	67	7	48.2	12	30	29.4	59	18.8	1.98	11	7	13	N.W.
Pittsboro .....	37.4	74	7	47.3	-4	30	27.4	78	19.9	3.60	14	5	12	N. E.
Raleigh .....	40.0	68	8	48.7	11	29	31.4	57	17.3	3.72	12	5	14	9 N.W.
Southport.....	47.1	71	14	55.9	22	28	38.9	49	17.0	2.24	14	9	8	11 N. E.
Southern Pines.....	36.2	72	14	51.7	7	29	26.8	65	24.9	4.05	18	4	9	S. W.
Salisbury .....	40.7	61	7	46.8	18	30	34.6	46	12.2	2.08	.....	.....	6	.....
Weldon .....	38.4	70	8	48.4	2	30	28.5	68	19.9	3.46	14	8	9	N. E.
Washington .....	39.9	76	7	54.3	3	29	25.5	73	28.8	3.27	15	8	8	9 N.W.
Wilmington.....	47.0	77	14	56.0	22	28	38.0	55	18.0	1.03	15	9	7	9 N. E.

## STATE METEOROLOGICAL SUMMARY FOR DECEMBER, 1892.

Mean Barometer 30.14 inches; normal for December, 30.16.

Highest Barometer 30.67 inches, on the 12th, at Lynchburg, Va.

Lowest Barometer 29.60 inches, on the 29th, at Southport.

Mean temperature 39.5 degrees; normal for December, 42.7 degrees.

Highest temperature 77, on the 11th, at Wilmington.

Lowest temperature -5, on the 29th, at Soapstone Mount.

Average rain-fall, 2.58 inches; normal for December, 4.00 inches.

Greatest monthly rain-fall, 4.61 inches, at Lewiston.

Least monthly rain-fall 0.76 inches at Marion.

Average number of cloudless days 14.

Average number of partly cloudy days, 8.

Average number of cloudy days, 9.

Average number of rainy days, 6.

Prevailing wind direction, north-west; average hourly velocity, 6.2 miles. Prevailing direction from many years' observations, north-east. Normal velocity, 7.6 miles per hour.



# BULLETIN

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FEBRUARY, 1893.

NO. II.

## *The St. Louis Epidemic.*

Two great cities of this country have been suffering from epidemics: Philadelphia from diphtheria, St. Louis from typhoid fever. The development of the epidemic in the latter city has been striking and serious. In October there were about 260 cases, in November over 1,358, increasing from 86 in the first week to 930 in the fourth. On one day 320 new cases were reported. This is something extraordinary in modern times, and unless the progress of the infection soon ceases, St. Louis will outstrip Chicago, which had 2,000 fatal, and probably 10,000 non-fatal, cases in 1891. The sanitary authorities of St. Louis trace the trouble to the water-supply of the city. This is taken from the river just below a number of bone-burning and rendering factories.

Sewers which drain a considerable area, in which these factories are situated, discharge their accumulations into the river just above the spot where water for the use of the city is taken. The Chief Sanitary Officer inspected the source of supply, and the *Republic* refers to his report as follows:

"The Prairie Avenue sewer drains some of the Lowell rendering establishments and empties into the river just above the water-works. 'Within a thousand feet of the present pumping station I found the Prairie Avenue sewer pouring a mass of filth into the river,' says the Sanitary Officer. 'That in itself is enough to contaminate the water. The stench in that vicinity was frightful. In this same district are the Gin Grass Creek and Harlem Creek. The water in both of these is foul, and, of course, emptying into the river so close to the pumping station, has a detrimental and dangerous influence on the city's supply.'"

The citizens of St. Louis have appreciated the danger, and, as we are informed, have been at work extending the mains some distance above the dangerous area. Unfortunately the new aqueduct was not completed in time.

There seems to be no opportunity for severe censure in this case, since the health authorities have been at work for some time trying to avert the misfortune which has overtaken their city. The epidemic is a forcible lesson in hygiene, though at the same time a tragic and expensive one.—*Medical Record*.

*The Deadly Water of St. Louis.*

Dr. Kurtmann read the chemical report. Water examined was taken by the medical committee and the authorities of the water-works from drinking fountains and settling basins. It was allowed to stand for twenty-four hours and *only examined* for the impurities *held in suspension* in it. It was found to contain more organic matter than is permissible, though not very much free ammonia. Nitrites and nitrates were present in excess. Albuminoid matter was found in *fifteen times the greatest allowable amount*.

Mr. Francis, the chief sanitary officer, said that 2,500 cases of typhoid fever had been reported between April 1 and November 30, 1,600 of these having occurred since November 16. No cases in parts of the city not reached by the water-supply. The mortality has been high—212 deaths having occurred in 1,500 cases. Post-mortems show the disease to be unusually severe.

What we learn from the above is, (1) that true typhoid fever is at present epidemic in St. Louis; (2) that it is of very virulent form; (3) that it is undoubtedly due to contamination of the water-supply. The fact that typhoid fever, which is now recognized to be essentially a disease of filth, should become epidemic in a city with such natural drainage as St. Louis possesses, is sufficiently humiliating in itself; that the conditions to which it is due should exist, is an evidence of culpable neglect on the part of some one. The people of St. Louis have a right to expect that their health will be guarded, and in our humble opinion, it seems that this is not well done when three creeks and a sewer, draining quite an extensive part of the city, are allowed to discharge their contents into the river immediately above the water-works. Again, we learn there is no chemist attached to the health department, the only chemical examination made of the water, so far as we can learn, being that made by Dr. Kurtmann of the medical society committee, which we have quoted from in this report.

It seems, however, that the disease is beginning to decrease—although still very virulent—owing largely to the fact that water for use is being boiled.—*The Clinique.*

*Summary of Reports from County Superintendents for January, 1893.*

ALAMANCE—Dr. G. W. Long, Graham. Influenza, mumps, whooping-cough and pneumonia have prevailed. The privies and pig-pens, as usual, in some of our towns are likely to give us trouble this summer. The sanitary condition of the Home is very good; that of the courthouse fair; that of the jail only tolerable, owing to old building.

ALEXANDER—Dr. R. B. Killian, Taylorsville. Health good, except pneumonia and influenza in different parts of the county. The sanitary condition of the public buildings is good.

ALLEGHANY—No Board of Health.

ANSON—Dr. E. S. Ashe, Wadesboro. No report.

BEAUFORT—Dr. S. T. Nicholson, Washington. No report.

BERTIE—No Board of Health.

BLADEN—Dr. N. Robinson, Elizabethtown. No report.

BRUNSWICK—No Board of Health.

BUNCOMBE—Dr. C. E. Hilliard, Asheville. No special disease has prevailed. The sanitary condition of the Home is good. The jail is undergoing repairs that will be of benefit.

BURKE—Dr. J. L. Laxton, Morganton. Nothing more than two cases of dysentery and a few of bronchitis to report. The public buildings are as last reported; they are kept in as good condition as such structures will admit of.

CABARRUS—No Board of Health.

CALDWELL—Dr. A. A. Kent, Lenoir. A few cases of bronchitis and three of pneumonia to report; nothing more. The condition of the Home is very good; the jail is in as good condition as the present building can be kept in—we need a new one, modern in arrangement.

CAMDEN—No Board of Health.

CARTERET—Dr. M. F. Arendell, Morehead City. No diseases to report. Our public buildings are old, but comfortable, and serve their purpose very well. I think the best way to improve them is to pull them down and build new ones.

CASWELL—Dr. R. H. Williamson, Yanceyville. The sanitary condition of the county and public buildings is good.

CATAWBA—Dr. Geo. H. West, Newton. One case of scarlatina reported; bronchitis and pneumonia have prevailed in the southern and western sections of the county.

CHATHAM—Dr. W. E. Headen, Pittsboro. Whooping-cough has prevailed in some parts of the county. The sanitary condition of the public buildings is good.

CHEROKEE—Dr. J. F. Abernathy, Murphy. Ten cases of typhoid fever. I had three cases of diphtheria last week; I gave notice to neighbors of nature and malignancy of the disease by publication, which I think has been quite sufficient. We have made no improvements on public buildings, except a little change in sewerage on Court-house Square.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. One case of diphtheria and two of typhoid fever. No local cause of disease; health of county remarkably good. Sanitary condition of public buildings is good. There has been no case of sickness in the jail during the past year.

COLUMBUS—Dr. I. Jackson, Whiteville. One case of typhoid fever and several of whooping-cough; nothing more. There has been an epidemic of hog-cholera in some parts of the county.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. No disease to report. Sanitary condition of the public buildings is good.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. No diseases reported by other physicians. A few cases of typhoid fever and pneumonia have occurred in the county, but the sickness is decreasing. The sanitary condition of the county is good, though in certain localities good might be done were more attention paid to drainage. The sanitary condition of the public buildings is good.

DUPLIN—Dr. Jas. W. Blount, Kenansville. Some cases of pneumonia; influenza quite common, owing to the severity of the weather during the month. There has been an epidemic of hog cholera. The sanitary condition of the public buildings is good; the inmates are well and well cared for.

DURHAM—Dr. N. M. Johnson, Durham. Measles and whooping-cough have prevailed in the town of Durham. Since my last report on jail sewerage, it has been put in good condition; the other public buildings are in good condition.

EDGECOMBE—Dr. Donald Williams, Tarboro. Health of county very good. Although the weather was the coldest for thirty-five years, there have been very few cases of lung or throat troubles. The sanitary condition of the public buildings is very good.

FORSYTH—Dr. D. N. Dalton, Winston. No report.

FRANKLIN—Dr. E. S. Foster, Louisburg. Five cases of typhoid fever reported; typhoid fever and pneumonia have prevailed in several portions of the county, but not many cases. The sanitary condition of the public buildings is very good.

GASTON—Dr. J. H. Jenkins, Dallas. No report.

GATES—No Board of Health.

GRAHAM—No Board of Health.

GRANVILLE—Dr. Patrick Booth, Oxford. Scattered cases of whooping-cough; some pneumonia and catarrhal diseases have prevailed in nearly all parts of the county. Sanitary condition of the public buildings unchanged.

GREENE—Dr. E. H. Sugg, Snow Hill. Pneumonia has prevailed; very little sickness of any other kind. The sanitary condition of the public buildings is good.

GUILFORD—Dr. E. R. Michaux, Greensboro. A great many cases of mumps, usually of mild character; otherwise health of county very good. The sanitary condition of the public buildings is very good, with the exception of the jail; the jail will do only fairly well in *cold weather*, and in *summer* is a nuisance and disgrace in many respects; we need a new jail very much indeed.

HALIFAX—Dr. I. E. Green, Weldon. Very little sickness in any part of the county.

HARNETT—No Board of Health.

HAYWOOD—Dr. J. Howell Way, Waynesville. Remarkably little sickness throughout the county. Hog cholera reported.

HENDERSON—Dr. J. L. Egerton, Hendersonville. One case of typhoid fever; nothing more to report. The sanitary condition of the public buildings is good.

HERTFORD—No Board of Health.

HYDE—No Board of Health.

IREDELL—Dr. W. J. Hill, Statesville. One case of typhoid fever reported. The sanitary condition of the county is good, except that millponds are right numerous. The public buildings are in good condition.

JOHNSTON—Dr. R. J. Noble, Smithfield. Remarkably healthy; a few cases of pneumonia. The public buildings are in good sanitary condition.

JONES—No Board of Heal.h.

LENOIR—Dr. C. B. Woodley, Kinston. Varicella and bronchitis have prevailed in several parts of the county.

LINCOLN—Dr. John W. Saine, Lincolnton. Mumps and catarrhal fevers have prevailed in certain parts of the county. The sanitary condition of the public buildings is good.

MACON—Dr. S. H. Lyle, Franklin. Catarrhal fever has prevailed in the northern and eastern portions of the county. In the present attack of la grippe the disease has spent its force altogether on the mucous surfaces, more particularly of the stomach and duodenum. The sanitary condition of the jail is not good, and no efforts are being made for its improvement.

MADISON—No Board of Health.

MARTIN—Dr. W. H. Harrell, Williamston. No report.

MCDOWELL—Dr. B. A. Cheek, Marion. Two cases of typhoid fever; catarrhal troubles have prevailed in different parts of the county. The sanitary condition of the public buildings is very good.

MECKLENBURG—No Board of Health.

MONTGOMERY—Dr. F. E. Asbury, Asbury. Measles, three; whooping-cough, six; scarlatina, two; and diphtheria, eight reported. Influenza has prevailed in all parts of the county.

MOORE—Dr. Gilbert McLeod, Carthage. One case of typhoid fever. There has been very little sickness. The court-house and jail are kept in good sanitary condition; the inmates of the Home are well cared for, but new buildings are badly needed; the County Commissioners are to consider the matter of new buildings at their next meeting.

NASH—Dr. J. J. Mann, Nashville. Pneumonia has prevailed to a great extent in some parts of the county. The sanitary condition of the public buildings is very good.

NEW HANOVER—Dr. F. W. Potter, Wilmington. Two cases of whooping-cough and two of typhoid fever reported. The public buildings are in good condition and well kept.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. Pneumonia has prevailed in some parts of the county. In Jackson township it is almost an epidemic; it has been of a very bad type, and several have died; no sickness of any consequence elsewhere in the county. The sanitary condition of the jail is good; of the Home, improved; of the county, generally bad.

ONSLOW—Dr. E. L. Cox, Jacksonville. Remittent fever, tonsillitis, etc., have prevailed in all parts of the county.

ORANGE—Dr. D. C. Parris, Hillsboro. Pneumonia, bronchitis, rheumatism and catarrhal fever are prevalent. The county is well drained, and there are no unsanitary conditions; the sanitary condition of the Home is as good as can be with the present arrangement of buildings; that of the jail is not good; that of the other public buildings is good.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. Walter C. Murphy, Burgaw, has been elected County Superintendent of Health since the death of Dr S. S. Satchwell.

PERQUIMANS—No Board of Health.

PERSON—No Board of Health.

PITT—Dr. B. T. Cox, Reddallia. Health of the county remarkably good. Three cases of diphtheria in one family, and a few cases of *la grippe* and pneumonia reported.

POLK—No Board of Health.

RANDOLPH—Dr. J. M. Boyette, Ashboro. Five cases of whooping-cough and four of typhoid fever reported; catarrhal fever and dysentery have prevailed in some sections; fall and winter have been extremely healthy; there has been an epidemic of chicken cholera; the sanitary condition of the jail and Home is good. We should have some way of warming the jail, as part of the prisoners were bound to suffer during the recent cold weather, there being only one stove in the building, and those who were confined in the cells were too far from it to receive much benefit.

RICHMOND—Dr. J. M. Stansill, Rockingham. One case of diphtheria reported; no other sickness except a few cases of catarrhal fever. Our Home for the Aged and Infirm is soon to be improved; the other buildings are in good condition.

ROBESON—Dr. R. F. Lewis, Lumberton. Some whooping-cough and scarlatina reported; catarrhal troubles have prevailed; the courthouse is in good condition; the ventilation of the jail is imperfect. The old poor-house farm has been sold and a more comfortable and better location will, during the year, be provided.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Two cases of typhoid fever reported; pneumonia, typhoid, *la grippe*, and catarrhs generally have prevailed in some sections. The unsanitary conditions in the county are the crooked, sluggish creeks with much undrained low lands, which still continue, and will, I suppose, until the people need the land, or the State shall take the matter of draining in hand, and in the interest of public health make the matter of ditching and reclaiming compulsory. The condition, as now existing, is surely a constant menace to public health. The sanitary condition of the public buildings is good. I report with pleasure that the Commissioners have advertised for bids to put a suitable fence

around the public buildings. I have frequently called their attention to this great need, and, though long delayed, it has come at last.

RUTHERFORD—Dr. W. A. Thompson, Cliffdale. One case of diphtheria and one of typhoid fever; the county has been very healthy. The sanitary condition of the county is as good as usual, but not what it should be, as our people do not look after that as they should, in the matter of privies, pig sties, etc. The sanitary condition of the public buildings is as good as the faulty construction of the buildings will admit of.

SAMPSON—Dr. John A. Stevens, Clinton. Three cases of scarlatina reported in one family; no other cases; said to be mild; pneumonia, pleurisy, bronchitis, influenza and malarial fever have occurred. The sanitary condition of the Home is good. Our county is without a jail, but we hope to have one in a few months; our prisoners are kept at present in Wayne County jail.

STANLY—Dr. A. C. Bayles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Four cases of diphtheria and eight of typhoid fever reported. The sanitary condition of the public buildings is good. Our county is now at work on a new building, which will be prepared for confining the insane. This has been a need for a long time.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. No sickness of importance to report. The sanitary condition of the public buildings is not good; steps are being taken to improve them.

TRANSYLVANIA—No Board of Health.

TYRRELL—Dr. Ab. Alexander, Columbia. Three cases of typhoid fever reported; it has been very healthy; there has been an epidemic of hog cholera. The sanitary condition of the public buildings is poor.

UNION—Dr. J. H. Blair, Monroe. Two cases of scarlatina reported. The sanitary condition of the Home is good. We are erecting a new jail, which will be completed by March 1.

VANCE—Dr. A. Cheatham, Henderson. Nothing said as to diseases. The sanitary condition of the county is good.

WAKE—Dr. James McKee, Raleigh. One case of scarlatina and one of typhoid fever reported. The sanitary condition of the public buildings is good.

WARREN—Dr. P. J. Macon, Warrenton. Pneumonia, bronchitis and chilblains have prevailed in all parts of the county. Two cases of scarlatina reported; this was contracted in New York and is of a very mild nature. All possible means in the way of isolation and fumigation are being used to prevent its spread. I hope the Legislature will pass the sanitary act now pending. We need further protection. In fact, the profession and laity demand it.

WASHINGTON—No Board of Health.

WATAUGA—Dr. W. B. Councill, Boone. Scarlatina has prevailed in all parts of the county, ten cases reported. It is very mild; no deaths; the county is unusually healthy for so cold a winter; the jail is new and modern and in good sanitary condition. The Home is composed of cottages, sixteen by sixteen feet; rooms all with open fireplaces. It is well kept and in good sanitary condition.

WAYNE—Dr. John Spicer, Goldsboro. There have been some pneumonia and bronchial troubles. The public buildings are in good sanitary condition.

WILKES—No Board of Health.

WILSON—Dr. Albert Anderson, Wilson. A few cases of whooping-cough and one of hemorrhagic malarial fever reported; intermittent fever has prevailed in different parts of the county. The sanitary conditions among the poorest of both races have not been so good for the last month. The sanitary condition of the public buildings is good, except the jail, and that will be good in eight or ten days.

YADKIN—Dr. J. R. Harding, Yadkinville, No report.

YANCEY—Dr. J. L. Ray, Burnsville. Several cases of whooping-cough and five of typhoid fever reported; there are also some cases of rheumatism and pneumonia. The jail is filthy, owing to the neglect of the jailer. The Home is very well kept and in fair condition.

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#### *Review of Diseases for January, 1893.*

BRONCHITIS—From Burke, Caldwell, Lenoir, Orange, Sampson and Wayne.

CATARRHAL DISEASES—From Granville, Lincoln, McDowell, Macon, Orange, Robeson and Rowan.

CHOLERA, IN CHICKENS—From Randolph.

CHOLERA, IN HOGS—From Duplin and Haywood.

DIPHTHERIA—From Cleveland, Montgomery, Pitt, Richmond, Rutherford and Stokes.

DYSENTERY—From Randolph.

INFLUENZA—Alamance, Alexander, Duplin, Macon, Montgomery, Pitt, Rowan and Sampson.

MALARIAL FEVER—From Onslow, Sampson and Wilson.

MALARIAL FEVER, HEMORRHAGIC—From Wilson.

MEASLES—From Durham and Montgomery.

MUMPS—From Alamance and Guilford.

PNEUMONIA—From Alamance, Alexander, Caldwell, Catawba, Davidson, Duplin, Franklin, Granville, Greene, Johnston, Nash, Northampton, Orange, Pitt, Rowan, Sampson, Wilson and Yancey—18 counties.

SCARLATINA—From Montgomery, Robeson, Sampson, Union, Wake, Warren and Watauga.

TYPHOID FEVER—From Cherokee, Cleveland, Columbus, Davidson, Franklin, Henderson, Iredell, McDowell, Moore, New Hanover, Randolph, Rutherford, Stokes, Tyrrell, Wake and Yancey—16 counties.

WHOOPING-COUGH—From Alamance, Chat-ham, Columbus, Durham, Montgomery, New Hanover, Randolph, Robeson, Wilson and Yancey—10 counties.

**Summary of Mortuary Reports for January.  
1893.**

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(TWENTY-FIVE TOWNS.)

	<i>White.</i>	<i>Col'd.</i>	<i>Total.</i>
Aggregate population . . . . .	72,631	51,477	124,108
Aggregate deaths . . . . .	73	77	150
Representing annual death-rate per 1,000, . . . . .	12.1	18.0	14.5
<i>Causes of death.</i>			
Typhoid fever . . . . .	1	1	2
Whooping-cough . . . . .	0	1	1
Measles . . . . .	1	0	1
Pneumonia . . . . .	13	8	21
Consumption . . . . .	4	15	19
Brain diseases . . . . .	7	0	7
Heart diseases . . . . .	15	7	22
Neurotic diseases . . . . .	4	2	6
Diarrhoeal diseases . . . . .	1	1	2
All other diseases . . . . .	26	37	63
Accident . . . . .	1	5	6
	73	77	150
Still-born . . . . .	8	5	13
Deaths under 5 years, . . . . .	10	23	32

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**Small-pox in Central Africa.**

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A French pioneer missionary to the Barotse, named Coillard, has given in the *Christian* for December 29, an account of his efforts to contend with epidemic small-pox in a tribe of very wild Africans. Dating from the return of a war party that brought back with them a multitude of captives, women and children chiefly and designated concisely as "slaves," the whole valley in which the missionary dwelt became the seat of small-pox. No adequate sanitary precautions can be adopted in the case of a wild

people like these. The warriors and their slaves, some of them infected, scattered themselves throughout the villages. Nearly every person sooner or later took the disease, even some who had formerly had it. The deaths became so frequent that the people left off wailing for their dead and many of the latter were not buried, but were thrown into the river or dragged off into the fields. The missionary proceeded to inoculate some cows, and, collecting the lymph, "vaccinated" the people with it. After many attempts he succeeded in getting a protective lymph. He even instructed some intelligent young tribesmen to inoculate the kine and to collect lymph and apply it. The negro doctors tried to imitate his methods and establish a keen competition for the purpose of enriching themselves, but some of them contracted the small-pox and died of it. The people flocked to the missionary by hundreds, but they could never be induced to return to the mission to part with the lymph from their own vaccinations, so that the missionary had to go again and again through the tedious ordeal of implanting the virus upon cows and calves. A curious feature about the transaction was the behavior of the king of the valley. He selfishly sought to limit the treatment to himself, his family, and his attendants, then to his own village, and then to the ruling persons of adjoining villages; but at last he reluctantly consented to its extension to the nation at large. The motive for this conduct seemed to be an ambition to show a kind of monopoly in the matter of plague repression. The missionary was not to be daunted, but continued his lymph production sufficiently to give supplies of his product to his brother-missionaries among the nations or tribes that were liable to come into contact with his own infected people.—*New York Medical Journal.*

*Condition of Jails and County Homes by Counties for January, 1893.*

COUNTIES.	JAIL.					HOME.				
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.		
Alamance.....	6				31	900				
Alexander.....	0				19					
Alleghany.....										
Anson.....										
Ashe.....										
Beaufort.....										
Bertie.....										
Bladen.....										
Brunswick.....										
Buncombe.....	41 (a)				20					
Burke.....	3	700			6	600				
Cabarrus.....										
Caldwell.....	6	*	2	4	8	*	3	3		
Camden.....										
Carteret.....	2	*	1	1	0					
Caswell.....	0				20	1,000	3	3		
Catawba.....	3			2	25		5	18		
Chatham.....	11				25					
Cherokee.....	3	*			2	*				
Chowan.....										
Clay.....										
Cleveland.....	21	800		14	21	1,000				3
Columbus.....	3	*		2	11	*				0
Craven.....										
Cumberland.....	8				16					
Currituck.....										
Dare.....										
Davidson.....	10	*	0	2	25	720	0	3		
Davie.....										
Duplin.....	1				7					
Durham.....	24 (b)	1,000		7	13	1,000				3
Edgecombe.....	11	*	3	2	26	*	5	4		
Forsyth.....										

\* Space exceeds one thousand cubic feet. (a) Includes 37 in house of correction, (b) includes 20 in house of correction.

*Condition of Jails and County Homes by Counties for January, 1893.—Continued.*

COUNTIES.	JAIL.				HOME.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Franklin .....	2				21			
Gaston.....								
Gates.....								
Graham .....								
Granville.....	9 (a)	*	3	0	25	*	11	6
Greene.....	2	500	..	..	8	1,000	..	1
Guilford.....	20	624	..	..	36	*	..	..
Halifax.....	24	1,000	8	6	56	7.0	30	24
Harnett.....								
Haywood.....	2	..	..	2	8	..	..	..
Henderson .....	2	..	..	..				
Hertford.....								
Hyde.....								
Iredell.....	13	..	..	..	21	..	..	..
Jackson.....								
Johnston.....	9	1,000	1	4	11	*	..	..
Jones.....								
Lenoir.....	3	*	1	2				
Lincoln.....	3	1,000	..	2	23	1,000	..	6
McDowell.....	4	*	0	0	11	*	0	0
Macon.....	2	*	0	2	0	..	..	..
Madison.....								
Martin.....								
Mecklenburg.....								
Mitchell.....								
Montgomery.....	7	..	..	2	15	..	..	8
Moore.....	4	*	0	2	7	*	1	4
Nash.....	6	600	..	1	26	1,000	4	3
New Hanover.....	22 (b)	650†	16	15	15	1,000	13	6
Northampton.....	4	800	2	2	25	500	8	4
Onslow.....	2	*	0	1	4	*	1	0
Orange.....	7	512	4	0	16	*	9	5
Pamlico .....								

\* Space exceeds one thousand cubic feet. † In house of correction, 900 cubic feet. (a) All in work-house (b) Includes 8 in house of correction.

*Condition of Jails and County Homes by Counties for January, 1893.—Continued.*

COUNTIES.	JAIL.					HOME.			
	Number prisoners confined.	Space allotted each (In cubic feet.)	Number giv- ing evide- ce of success- ful vac- cination.	Number who can read and write.	Number inmates in	Space allotted each (In cubic feet.)	Number giv- ing evide- ce of success- ful vac- cination.	Number who can read and write.	
Pasquotank.....									
Pender.....									
Perquimans.....									
Person.....									
Pitt.....					16				
Polk.....									
Randolph.....	7				27				
Richmond.....	14		5	5	12		2	2	
Robeson.....	18 (a)	864			7	*			
Rockingham.....									
Rowan.....	15	463	8	10	21	*	0	2	
Rutherford.....	6	*			28	800			
Sampson.....	†				21				
Stanly.....									
Stokes.....	8	500	3	3	22	400	4	2	
Surry.....									
Swain.....									
Transylvania.....									
Tyrrell.....	0				0				
Union.....	15				35				
Vancee.....	3	*			20	*			
Wake.....	68 (b)	*			76				
Warren.....	2	*		2	17	*		2	
Washington.....									
Watauga.....	2	500	0	0	7	*	5	0	
Wayne.....	10	952			17	*		0	
Wilkes.....									
Wilson.....	7	*	0	2	23	*	4	6	
Yadkin.....									
Yancey.....	1	*	0	1	1	*			

\* Space exceeds one thousand cubic feet. † Pri-oners in Wayne County jail. (a) Includes 10 in house of correction. (b) Includes 59 in house of correction.

*Mortuary Report for January, 1893.*

TOWNS AND REPORTERS.	RACES.	POPULA- TION.	TEMPORARY ANNUAL DEATH RATE PER 1,000.		Typhoid Fever.	Scarlet Fever.	Malaria Fever.	Diphtheria.	Whooping-cough.	Measles.	Pneumonia.	Consumption.	Brain Diseases.	Heart Diseases.	Neurotic Diseases.	Diarrhoeal Diseases.	All Other Diseases.	Accident.	Suicide.	TOTAL DEATHS.	TOTAL BIRTHS.
			By Races.	Total.																	
Asheville	White.	7,500	11.2	10.3						1	1	5							7	9	2
Dr. C. E. Hilliard.	Colored.	3,000	10,500	8.9	10.3					1	1	1							2	9	1
Charlotte	White.	8,000	11,000	18.0	21.4					2	1	3	6						12	25	2
Fred. Nash, Esq.	Colored.	6,000	26.0							1	2	8	2						13	25	5
Durham	White.	4,500	8,000	10.7	10.5					1	1	1	2						2	4	2
Dr. N. M. Johnson.	Colored.	3,500	8,000	10.3	10.5					1	1	1	1						1	3	7
Fayetteville	White.	2,800	5,000	0.0	2.4						1	1	0						0	1	1
Dr. J. H. Marsh.	Colored.	2,200	5,000	5.4									1						1	1	1
Greensboro	White.	4,000	6,000	3.0	4.0								1						1	1	0
Dr. E. R. Michaux.	Colored.	2,000	6,000	6.0									1						1	2	0
Goldsboro	White.	2,800	5,000	17.4	14.4					1	1	2	2						4	6	
Mayor Hollowell.	Colored.	2,200	5,000	10.9									2						2	2	
Henderson	White.	2,256	4,256	5.3	30.0	16.9					1	1	1	1					1	6	
Dr. A. Cheatham.	Colored.	2,000	4,256	30.0									1						1	5	
Hillsboro	White.	600	1,000	10.0	36.0								2						1	3	
Dr. D. C. Parris.	Colored.	400	1,000	30.0									1						1	3	
Lexington	White.	-----	-----	-----	-----								1						1	1	
Dr. R. L. Payne, Jr.	Colored.	-----	-----	-----	-----								1						1	2	
Marion	White.	650	800	55.0	75.0					1	1	1	1						3	5	
Dr. B. A. Cheek.	Colored.	150	800	160.0									2						2	2	
Monroe	White.	1,200	2,000	10.0	21.0								1						1	4	
Dr. W. D. Pemberton.	Colored.	800	2,000	45.0									1	1	1				3	4	
Morehead City	White.	1,075	2,23	1,298	0.0	0.0													0	0	
Mayor T. C. Davis.	Colored.	223	1,298	0.0															0	0	
Oxford	White.	1,706	3,300	21.2	25.4					2	1	1	1						3	7	1
Dr. P. Booth.	Colored.	1,600	3,300	30.0									2						4	7	4
Raleigh	White.	8,000	15,000	13.5	17.1	15.2				3	1	6						9	19	2	
Dr. Jas. McKee.	Colored.	7,000	15,000	17.1						1	3	5	1					10	19	2	
Rockingham	White.	1,200	1,700	20.0	21.2								1	1					2	3	
Dr. J. M. Stansill.	Colored.	500	1,700	21.0									1						1	3	
Rocky Mount	White.	800	1,200	30.0	20.0					1	1	1	1						2	2	
Dr. G. L. Wimberly.	Colored.	400	1,200	0.0															0	2	
Salem	White.	3,942	4,284	18.3	19.6					1	1	2	2						6	7	
Mayor Stockton.	Colored.	342	4,284	35.1						1	1	1	1						1	7	
Salisbury	White.	3,500	5,500	10.3	21.0	15.3				1	1	2	2						3	7	1
Dr. J. J. Summerell.	Colored.	2,000	5,500	0.0						1	1	3	3						4	7	
Scotland Neck	White.	700	1,100	0.0	0.0														0	0	
Mayor J. A. Perry.	Colored.	100	1,100	0.0	0.0														0	0	
Statesville	White.	2,000	2,500	0.0	0.0														0	0	
Dr. W. J. Hill.	Colored.	500	2,500	0.0															0	0	
Southport	White.	800	1,200	15.0	30.0	30.0												1	1	1	
P. J. Farrell, Esq.	Colored.	400	1,200	60.0														1	2	3	1
Tarboro	White.	1,258	2,370	9.5	10.1								1						1	2	
Dr. D. Williams.	Colored.	1,112	2,370	10.8									1						1	2	
Warrenton	White.	650	1,200	36.9	21.8								2						3	3	
Dr. P. J. Macon.	Colored.	550	1,200	21.8									1						1	3	
Weldon	White.	700	1,100	0.0	8.6														0	1	
Mayor J. T. Gooch.	Colored.	700	1,100	17.1															1	1	
Wilmington	White.	10,000	22,000	1.8	11.9	1				1	1	1	1					4	21	1	
Dr. F. W. Potter.	Colored.	12,000	22,000	17.0						1	1	3	2	2	9			17	21	7	
Wilson	White.	2,000	3,500	24.0	17.1					1	1	1	1						4	5	
Dr. A. Anderson.	Colored.	1,500	3,500	8.0						1	1	1	1						1	1	

**Meteorological Summary for North Carolina, January, 1893.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.  
H. B. BATTLE, Ph. D., Director. C. F. von HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										No. of Days					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Rel. Humidity.	Total Precipitation.	Clear.	Partly Cloudy.	Cloudy.	Rainy.	Prevailing Wind.
Asheville.....	26.7	65	31	37.8	-9	16	16.4	71	21.4	63.0	3.29	15	8	8	11	N.
Bakersville .....	24.4	63	27	41.1	-17	20	7.6	80	33.5	.....	3.70	16	5	10	10	N.W.
Charlotte.....	33.0	67	28	41.6	5	16	24.4	62	17.2	.....	2.43	14	11	6	9	S. W.
Chapel Hill .....	30.0	66	28	42.7	-4	16	17.4	67	25.3	.....	3.04	....	....	....	8	W.
Douglas .....	23.4	63	28	35.5	-8	17	11.4	71	24.1	.....	4.71	17	6	8	9	S. W.
Horse Cove.....	28.5	59	29	36.7	-3	16	20.4	62	16.3	.....	5.17	17	7	7	7	N.W.
Littleton .....	27.6	61	27	39.5	-4	16	15.8	65	23.7	.....	3.30	15	7	9	6	N.W.
Lenoir .....	27.3	58	26	36.3	-15	16	18.8	73	17.5	.....	2.31	16	7	8	5	N.W.
Louisburg .....	17.1	60	18	38.4	-5	16	15.9	65	22.5	.....	4.72	13	11	17	8	N.W.
Mount Airy.....	27.0	62	29	38.5	0	16	15.5	62	23.0	.....	2.32	10	10	11	6	N.W.
Mount Pleasant.....	30.4	61	28	42.3	-4	21	18.6	68	13.7	.....	2.33	10	10	11	7	S. W.
Marion .....	29.7	61	31	42.0	-9	16	17.4	70	21.6	.....	4.25	20	0	11	7	N.W.
Newbern .....	32.0	66	27	41.7	6	17	22.4	60	19.3	.....	3.08	....	....	6	.....	
Oak Ridge.....	29.2	63	28	39.5	-5	14	18.8	68	20.7	71.6	1.86	10	7	14	8	N.W.
Pittsboro .....	28.0	61	28	38.7	-5	17	17.3	63	21.4	.....	3.70	10	14	7	7	N. E.
Raleigh .....	30.8	65	28	40.4	2	17	21.1	63	19.3	74.0	3.70	13	6	12	11	N.W.
Rockingham.....	35.7	76	25	49.3	-2	20	22.1	78	27.2	.....	1.55	16	5	10	7	N.W.
Roxboro.....	29.7	69	28	39.9	0	11	19.5	69	20.4	.....	2.27	12	8	11	6	.....
Soapstone Mount.....	28.7	65	28	33.1	-9	21	14.2	74	29.2	.....	2.33	7	13	11	6	W.
Saxon .....	16.8	62	27	38.5	-8	15	15.1	70	23.4	.....	2.25	11	14	6	9	W.
Southern Pines.....	33.7	66	28	41.8	6	16	25.6	60	16.2	.....	2.75	14	10	7	6	S. W.
Salisbury .....	31.4	60	28	38.4	6	16	24.5	54	13.9	.....	1.93	....	....	6	.....	
Tarboro .....	31.3	69	27	43.5	-1	21	19.1	70	24.4	.....	2.99	12	11	8	7	N.W.
Wilmington .....	39.0	70	29	48.0	13	16	30.0	57	18.0	76.0	2.26	18	6	7	10	N.W.
Weldon .....	28.2	64	29	40.0	-9	17	16.4	73	23.6	.....	2.39	13	9	9	9	S.

## STATE METEOROLOGICAL SUMMARY FOR JANUARY, 1893.

Mean Barometer 30.07 inches; normal for January, 30.17. Highest Barometer 30.52 on the 16th, at Knoxville, Tenn. Lowest Barometer 29.35 on the 9th, at Kitty Hawk.  
 Mean temperature 30.3 degrees; normal for January, 40.8. Highest temperature 76, on the 25th, at Rockingham. Lowest temperature -17, on the 20th, at Bakersville.  
 Average rain-fall, 2.86 inches; normal for January, 4.52 inches. Greatest monthly rain-fall, 5.54 inches, at Columbus. Least monthly rain-fall 1.31 inches at Lynn.  
 Average number of clear days 14. Average number of partly cloudy days, 8. Average number of cloudy days, 9. Average number of rainy days, 8.  
 Prevailing wind direction, north-west; average velocity, 8.5 miles per hour. Normal direction for January, south west. Normal velocity, 8.3 miles per hour.  
 January, 1893, was the coldest month since January, 1857.

# BULLETIN

OF THE

## NORTH CAROLINA BOARD OF HEALTH.

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MARCH, 1893.

NO. 12.

### *The Recent Sanitary Legislation.*

At the meeting of the Health Conference, upon the invitation of the State Board of Health, in Raleigh on the 24th of July last, the Secretary of the latter body presented to the meeting a proposed substitute for the "Act Relating to the Board of Health" enacted in 1885. This substitute consisted of the Act of 1885 complete somewhat clarified and amplified, and about an equal amount of new matter (sections 10 to 21, inclusive, and 24 and 25) relating particularly to the perfecting of internal quarantine, the protection of drinking waters, the transportation of dead bodies, and the conferring of authority on towns and counties to make improvements in sanitation.

The proposed bill was read and carefully considered section by section, being amended in some respects after thorough discussion. It was then presented to a joint meeting of the Committees on Public Health of the Senate and House of Representatives by the Board of Health in a body. Introduced in the Senate, its passage was unanimously recommended by the Commit-

tee on Public Health, to which it was referred. When it came up, however, it was amended in several respects. The most serious departure from the recommendations of the Board of Health and Health Conference was the transference of the control of the Board from the State Medical Society, which, under the bill as introduced, as well as under the old law, elected six of the nine members, to the Governor, by reducing that number to four and by giving the Governor the appointment of five instead of three. Another change was in reducing the term of office of the members elected by the Society from six to two years, to correspond with that of the appointees of the Governor. In other respects it was passed essentially as introduced, and we feel that the cause of preventive medicine in North Carolina has been greatly strengthened and advanced.

A letter asking for a list of the registered physicians in each county has been sent by the Secretary to all the Superior Court Clerks, and as soon as the replies are in a copy of the new law in pamphlet form will be sent to every registered physician in the State. It will also be sent with pleasure to anyone applying for it.

*Summary of Reports from County Superintendents for February, 1893.*

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ALAMANCE—Dr. George W. Long, Graham. Whooping-cough in places; no epidemic. The jail is tolerable only; no efforts at improvement.

ALEXANDER—Dr. R. B. Killian, Taylorsville. Pneumonia has prevailed in certain portions. The sanitary condition of the public buildings is very good.

ALLEGHANY—No Board of Health.

ANSON—Dr. E. S. Ashe, Wadesboro. No report.

BEAUFORT—Dr. S. T. Nicholson, Washington. No report.

BERTIE—No Board of Health.

BLADEN—Dr. N. Robinson, Elizabethtown. No report.

BRUNSWICK—No Board of Health.

BUNCOMBE—Dr. Charles E. Hilliard, Asheville. No special disease to report. The jail has been repaired recently. The sanitary condition of the public buildings is good.

BURKE—Dr. J. L. Laxton, Morganton. Less sickness this winter than for many years; two cases of pneumonia reported. The public buildings are in the same condition as at last report; I hear of no efforts at improvement.

CABARRUS—No Board of Health.

CALDWELL—Dr. A. A. Kent, Lenoir. Good health has prevailed during the month; catarrhal affections and three cases of pneumonia reported.

CAMDEN—No Board of Health.

CARTERET—Dr. M. F. Arendell, Morehead City. No diseases to report. The public buildings are in very good condition; they are kept nice and clean.

CASWELL—Dr. R. H. Williamson, Yanceyville. No report.

CATAWBA—Dr. George H. West, Newton. Catarrhal affections have prevailed. The sanitary condition of the public buildings is good.

CHATTAH—Dr. W. E. Headen, Pittsboro. Tonsillitis and pneumonia have prevailed in some parts of the county. The sanitary condition of the public buildings is good.

CHEROKEE—Dr. J. F. Abernathy, Murphy. The diphtheria reported last month was confined to one family; there were five cases in that family, with two deaths; there are no new cases. The public buildings are in very fair sanitary condition; the inmates are healthy, well fed and comfortably clothed.

CHOWAN—No Board of Health.

CLAY—No Board of Health.

CLEVELAND—Dr. O. P. Gardner, Shelby. No disease to report; health of county remarkably good; one case of meningitis reported. There is a general effort made at improvement of the public buildings.

COLUMBUS—Dr. Isaac Jackson, Whiteville. Many cases of whooping-cough of mild type, and some scarlatina in distant parts of the county. There has been an epidemic of hog cholera in some sections. The general sanitary condition of the public buildings is good, but to improve them the suggestions of the grand jurors will be respected by the County Commissioners.

CRAVEN—Dr. Leinster Duffy, Newbern. Measles and whooping-cough have occurred; pneumonia, pleurisy and catarrhal troubles generally have prevailed to some extent. The sanitary condition of the county and public buildings is good.

CUMBERLAND—Dr. J. H. Marsh, Fayetteville. Nothing said as to diseases. The sanitary condition of the public buildings is tolerably good.

CURRITUCK—No Board of Health.

DARE—No Board of Health.

DAVIDSON—Dr. R. L. Payne, Jr., Lexington. Varicella has prevailed in the northern parts of the county. The sanitary condition of the county is good, except in a few sections where drainage is needed; the condition of the public buildings is good.

DUPLIN—Dr. James W. Blount, Kenansville. No diseases reported. There is an epidemic of hog cholera. The sanitary condition of the public buildings is good.

DURHAM—Dr. N. M. Johnson, Durham. Measles has prevailed to some extent; there have been three deaths in Durham among puerperal women, supposed to be from puerperal

peritonitis. The sanitary condition of the county and public buildings is good.

**EDGECOMBE**—Dr. Donald Williams, Tarboro. The health of the county is very good; a few cases of pneumonia reported. The sanitary condition of the public buildings is very good.

**FORSYTH**—Dr. D. N. Dalton, Winston. No report.

**FRANKLIN**—Dr. E. S. Foster, Louisburg. Pneumonia of a mild type has prevailed. One death has occurred among the typhoid cases reported last month: no new cases. The sanitary condition of the public buildings is very good.

**GASTON**—Dr. J. H. Jenkins, Dallas. No report.

**GATES**—No Board of Health.

**GRAHAM**—No Board of Health.

**GRANVILLE**—Dr. Patrick Booth, Oxford. Six cases of whooping-cough reported; pneumonia and tonsillitis have prevailed to a limited extent in various parts of the county. The sanitary condition of the county is good, except the water supply and drainage need attention. The condition of the public buildings is fair.

**GREENE**—Dr. E. H. Sugg, Snow Hill. Malarial fever and pneumonia have prevailed. The sanitary condition of the public buildings is good.

**GUILFORD**—Dr. E. R. Michaux, Greensboro. Health of town and county has been excellent. The sanitary condition of the public buildings is good, except that of the jail, which is *as usual*. Some improvements are being made in the grounds around the court-house.

**HALIFAX**—Dr. I. E. Green, Weldon. No report.

**HARNETT**—No Board of Health.

**HAYWOOD**—Dr. J. Howell Way, Waynesville. A few cases of measles; remarkably little sickness in the county. Sanitary matters are improving; the masses of our people are paying more attention to sanitation. The sanitary condition of the jail is as good as the jailer can make it, but bad at best. It is simply a disgrace to a civilized people. There is a very strong public sentiment in favor of a new and

modern jail, but as yet the officials have not moved in the matter.

**HENDERSON**—Dr. James E. Egerton, Hendersonville. One case of typhoid fever; no other diseases to report. The sanitary condition of the public buildings is very good.

**HERTFORD**—No Board of Health.

**HYDE**—No Board of Health.

**IREDELL**—Dr. W. J. Hill, Statesville. No report.

**JOHNSTON**—Dr. R. J. Noble, Smithfield. Remarkably healthy; a few cases of pneumonia only. All public buildings are in good sanitary condition.

**JONES**—No Board of Health.

**LENOIR**—Dr. C. B. Woodley, Kinston. No diseases reported.

**LINCOLN**—Dr. John W. Saine, Lincolnton. Whooping-cough and pneumonia have prevailed in different parts of the county. The sanitary condition of the public buildings is very good.

**MACON**—Dr. S. H. Lyle, Franklin. No report.

**MADISON**—No Board of Health.

**MARTIN**—Dr. W. H. Harrell, Williamston. No report.

**MCDOWELL**—Dr. B. S. Cheek, Marion. Catarrhal troubles have prevailed in different parts of the county. The sanitary condition of the Home is excellent; the jail is kept clean and in as good condition as possible.

**MECKLENBURG**—A County Board of Health was organized September 24, and Dr. H. M. Wilder, of Charlotte, was elected Superintendent of Health.

**MONTGOMERY**—Dr. F. E. Asbury, Asbury. Two cases of diphtheria reported; influenza has prevailed in all parts of the county. The sanitary condition of the public buildings is good.

**MOORE**—Dr. Gilbert McLeod, Carthage. One case of typhoid fever reported; nothing more, except a few cases of influenza in mild form. The public buildings are in good condition, but new buildings are needed at the Home; the Commissioners have the matter under consideration.

NASH—Dr. J. J. Mann, Nashville. No diseases reported. The sanitary condition of the public buildings is very good.

NEW HANOVER—Dr. F. W. Potter, Wilmington. Measles (4), whooping-cough (4), scarlatina (3) and typhoid fever (1) reported. Muscular (subacute) rheumatism has prevailed in all parts of the county. The jail has been improved as regards floors, which have been cemented. The Home and surroundings have been very much improved, thoroughly scoured and whitewashed; the fences have been repaired and some parts made new.

NORTHAMPTON—Dr. H. W. Lewis, Jackson. No sickness of any moment has prevailed in any part of the county, except a few cases of pneumonia. The sanitary condition of the county is about as usual at this season of the year, ditches all filled up from winter rains and drainage much needed. The sanitary condition of the jail is excellent; that of the Home not good.

ONSLOW—Dr. E. L. Cox, Jacksonville. A few cases of pneumonia, roseola, mumps, remittent and intermittent fevers reported. The condition of the jail is better than it was two months ago; the window-panes have been put in.

ORANGE—Dr. D. C. Paris, Hillsboro. Less general sickness than for several years past. There have been a few cases of mild influenza, bronchitis, pneumonia, gastric troubles, rheumatism and many cases of whooping-cough. The sanitary condition of the public buildings is fairly good, except the jail.

PAMLICO—No Board of Health.

PASQUOTANK—No Board of Health.

PENDER—Dr. Walter C. Murphy, Burgaw. No report.

PERQUIMANS—No Board of Health.

PERSON—No Board of Health.

PITT—Dr. B. T. Cox, Redallia. Some la grippe and pneumonia have prevailed in nearly all parts of the county. There is some distemper among horses and cholera among hogs. There is now and then an occasional case of malarial fever in some sections.

POLK—No Board of Health.

RANDOLPH—Dr. J. Middleton Boyette, Ashboro. Very little sickness; a few cases of ton-

sillitis and two cases of pneumonia reported. The sanitary condition of the public buildings is good.

RICHMOND—Dr. J. M. Stansill, Rockingham. Three cases of scarlatina (very malignant) and four of diphtheria reported. There will be improvement at the Home in a few months.

ROBESON—Dr. R. F. Lewis, Lumberton. Scarcely any sickness has prevailed; some whooping-cough reported. There has been an epidemic of hog cholera in some portions of the county. The sanitary condition of the public buildings is as before stated. During the summer we propose to have a decent County Home.

ROCKINGHAM—No Board of Health.

ROWAN—Dr. J. J. Summerell, Salisbury. Catarrhal diseases have prevailed in some parts of the county. The public buildings are in good sanitary condition. The present inmates of the Home are humanely cared for and treated kindly.

RUTHERFORD—Dr. W. A. Thompson, Rutherfordton. Whooping-cough has prevailed in all parts of the county. The sanitary condition of the county is not what it should be. Our people pay very little attention to sanitation. They say we have natural drainage and all will be well. Water-closets and pig-styes are often found above springs or near wells. The public buildings are unchanged since my last report, and in as good condition as their faulty construction will admit of.

SAMPSON—Dr. John A. Stevens, Clinton. A few cases of measles, one of typhoid fever, some pneumonia, pleurisy and bronchitis reported. There has been an epidemic of cholera in hogs and distemper in horses. No reports from other physicians. A new jail of brick, with sanitary arrangements, is to be built.

STANLY—Dr. A. C. Bayles, New London. No report.

STOKES—Dr. J. W. Neal, Meadows. Nothing said as to diseases. The sanitary condition of the public buildings is good. The county is now building a house for confining the insane.

SURRY—No Board of Health.

SWAIN—Dr. R. L. Davis, Bryson City. Not much sickness; no special diseases to report. The sanitary condition of the public buildings is not good, and there are no efforts at present to improve them.

**TRANSYLVANIA**—No Board of Health.

**TYRRELL**—Dr. Ab. Alexander, Columbia. No report.

**UNION**—Dr. J. H. Blair, Monroe. Nothing but a few cases of pneumonia to report. The County Home is in good sanitary condition. The jail is yet incomplete.

**VANCE**—Dr. W. T. Cheatham has become County Superintendent, in place of Dr. A. Cheatham, who removed to Durham. Three cases of scarlatina reported; there has been some cholera-morbus. The sanitary condition of the public buildings is excellent.

**WARREN**—Dr. P. J. Macon, Warrenton. Pneumonia and catarrhal fever have prevailed in all parts of the county. The sanitary condition of the public buildings is very good.

**WASHINGTON**—No Board of Health.

**WATAUGA**—Dr. W. B. Council, Boone. Scarlatina, among children, has prevailed in all parts of the county; ten cases reported; it has been very mild; only one death, and that was from one of the sequelæ. The jail and Home are in good condition and well kept; both new and modern.

**WAKE**—Dr. James McKee, Raleigh. Three cases of scarlatina reported. The sanitary condition of the public buildings is good.

**WAYNE**—Dr. John Spicer, Goldsboro. No diseases in the list dangerous to public health to report. Pneumonia was the most common disease for February. The public buildings are in good condition.

**WILKES**—No Board of Health.

**WILSON**—Dr. Albert Anderson, Wilson. A few cases of whooping-cough reported; malarial troubles and colds have prevailed in all parts of the county. The sanitary condition of the public buildings is good.

**YADKIN**—Dr. T. R. Harding, Yadkinville. No report.

**YANCEY**—Dr. J. L. Ray, Burnsville. No report.

#### *Review of Diseases for February, 1893.*

**BRONCHITIS**—From Sampson.

**CATARRHAL DISEASES**—From Caldwell, Craven, McDowell, Orange, Rockingham and Wilson.

**CHOLERA-MORBUS**—From Vance.

**CHOLERA, IN HOGS**—From Columbus, Duplin, Pitt, Robeson and Sampson.

**DIPHTHERIA**—From Montgomery and Richmond.

**DISTEMPER, IN HORSES**—From Pitt and Sampson.

**INFLUENZA**—From Montgomery, Moore and Pitt.

**MALARIAL FEVER**—From Greene, Onslow and Wilson.

**MEASLES**—From Craven, Durham, Haywood, New Hanover, Onslow and Sampson.

**MUMPS**—From Onslow.

**PNEUMONIA**—From Alexander, Burke, Caldwell, Chatham, Craven, Edgecombe, Franklin, Granville, Greene, Johnston, Lincoln, Northampton, Onslow, Orange, Pitt, Randolph, Sampson, Union and Wayne.

**PUERPERAL PERITONITIS**—From Durham.

**RHEUMATISM**—From New Hanover and Orange.

**SCARLATINA**—From Columbus, New Hanover, Richmond, Vance, Wake and Watauga.

**TONSILLITIS**—From Chatham, Granville and Randolph.

**TYPHOID FEVER**—From New Hanover and Sampson.

**VARICELLA**—From Davidson.

**WHOOPING-COUGH**—From Alamance, Columbus, Craven, Lincoln, New Hanover, Orange, Robeson, Rutherford and Wilson.

#### *Summary of Mortuary Reports for February, 1893.*

##### (TWENTY-FIVE TOWNS.)

	White.	Col'd.	Total.
Aggregate population.	71,354	51,372	122,756
Aggregate deaths . . . . .	53	72	125
Representing annual death-rate per 1,000.	8.9	16.8	12.2

##### *Causes of death.*

Typhoid fever . . . . .	2	0	2
Malarial fever . . . . .	1	2	3
Pneumonia . . . . .	10	14	24
Consumption . . . . .	4	16	20
Brain diseases . . . . .	3	3	6
Heart diseases . . . . .	8	7	15
Neurotic diseases . . . . .	2	3	5
Diarrhoeal diseases . . . . .	1	1	2
All other diseases . . . . .	20	25	45
Accident . . . . .	2	1	3
	53	72	125

*Condition of Jails and County Homes by Counties for February, 1893.*

COUNTIES.	JAIL.				HOME.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number Inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Alamance.....	9 (a)	500	.....	.....	32	1,000	.....	.....
Alexander.....	1	.....	.....	.....	10	.....	.....	.....
Alleghany.....	.....	.....	.....	.....	.....	.....	.....	.....
Anson.....	.....	.....	.....	.....	.....	.....	.....	.....
Ashe.....	.....	.....	.....	.....	.....	.....	.....	.....
Beaufort.....	.....	.....	.....	.....	.....	.....	.....	.....
Bertie.....	.....	.....	.....	.....	.....	.....	.....	.....
Bladen.....	.....	.....	.....	.....	.....	.....	.....	.....
Brunswick.....	.....	.....	.....	.....	.....	.....	.....	.....
Buncombe.....	48 (b)	.....	.....	.....	.....	.....	.....	.....
Burke.....	5	600	.....	.....	10	500	.....	.....
Cabarrus.....	.....	.....	.....	.....	.....	.....	.....	.....
Caldwell.....	3	*	0	3	8	*	3	4
Camden.....	.....	.....	.....	.....	.....	.....	.....	.....
Carteret.....	2	*	0	0	.....	.....	.....	.....
Caswell.....	.....	.....	.....	.....	.....	.....	.....	.....
Catawba.....	0	.....	.....	.....	26	.....	5	15
Chatham.....	3	.....	.....	.....	28	.....	.....	.....
Cherokee.....	3	.....	.....	.....	2	.....	.....	.....
Chowan.....	.....	.....	.....	.....	.....	.....	.....	.....
Clay.....	.....	.....	.....	.....	.....	.....	.....	.....
Cleveland.....	22	684	.....	10	21	1,000	.....	2
Columbus.....	2	*	.....	1	10	*	.....	0
Craven.....	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland.....	5	.....	.....	.....	15	.....	.....	.....
Currituck.....	.....	.....	.....	.....	.....	.....	.....	.....
Dare.....	.....	.....	.....	.....	.....	.....	.....	.....
Davidson.....	9	*	0	3	24	721	0	3
Davie.....	.....	.....	.....	.....	.....	.....	.....	.....
Duplin.....	1	.....	.....	.....	7	.....	.....	.....
Durham.....	31 (c)	1,000	.....	6	17	1,000	.....	4
Edgecombe.....	13	*	3	2	26	*	2	1
Forsyth.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Space exceeds one thousand cubic feet. (a) Includes 2 in house of correction, (b) Includes 30 in house of correction. (c) Includes 21 in house of correction.

*Condition of Jails and County Homes by Counties for February, 1893.—Continued.*

COUNTIES.	JAIL.				HOME.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giv- ing evidence of successful vaccination.	Number who can read and write.
Franklin .....	4	.....	.....	.....	20	.....	.....	.....
Gaston .....	.....	.....	.....	.....	.....	.....	.....	.....
Gates .....	.....	.....	.....	.....	.....	.....	.....	.....
Graham .....	.....	.....	.....	.....	.....	.....	.....	.....
Granville.....	11 (a)	*	1	2	22	*	9	11
Greene.....	1	500	..	..	8	1,000	..	..
Guildford.....	21	156	..	..	36	*	..	..
Halifax.....	.....	.....	.....	.....	.....	.....	.....	.....
Harnett.....	.....	.....	.....	.....	.....	.....	.....	.....
Haywood.....	3	.....	0	2	.....	.....	.....	.....
Henderson .....	4	.....	.....	.....	2	.....	.....	.....
Hertford.....	.....	.....	.....	.....	.....	.....	.....	.....
Hyde.....	.....	.....	.....	.....	.....	.....	.....	.....
Iredell .....	.....	.....	.....	.....	.....	.....	.....	.....
Jackson .....	.....	.....	.....	.....	.....	.....	.....	.....
Johnston .....	4	1,000	1	3	12	*	..	4
Jones.....	.....	.....	.....	.....	.....	.....	.....	.....
Lenoir.....	3	*	1	2	.....	.....	.....	.....
Lincoln .....	7	1,000	..	3	22	1,000	..	..
McDowell.....	6	.....	0	1	9	.....	0	..
Macon.....	.....	.....	.....	.....	.....	.....	.....	.....
Madison .....	.....	.....	.....	.....	.....	.....	.....	.....
Martin.....	.....	.....	.....	.....	.....	.....	.....	.....
Mecklenburg.....	.....	.....	.....	.....	.....	.....	.....	.....
Mitchell .....	.....	.....	.....	.....	.....	.....	.....	.....
Montgomery.....	6	.....	.....	.....	14	.....	.....	.....
Moore.....	6	*	0	2	8	*	1	4
Nash.....	4	600	2	3	26	1,000	3	4
New Hanover.....	43 (b)	650	26	15	16	1,000	9	10
Northampton.....	4	.....	2	2	32	.....	12	10
Onslow .....	2	*	..	1	4	*	1	1
Orange.....	7	512	2	1	16	*	9	4
Pamlico .....	.....	.....	.....	.....	.....	.....	.....	.....

\* Space exceeds one thousand cubic feet. (a) Includes 7 in house of correction. (b) Includes 8 in house of correction.

*Condition of Jails and County Homes by Counties for February, 1893.—Continued.*

COUNTIES.	JAIL.				HOME.			
	Number prisoners confined.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.	Number inmates in.	Space allotted each. (In cubic feet.)	Number giving evidence of successful vaccination.	Number who can read and write.
Pasquotank.....								
Pender.....								
Perquimans.....								
Person.....								
Pitt.....					16			
Polk.....								
Randolph.....	10				27			
Richmond.....	18		5	7				
Robeson.....	10 (a)	*			6	*		
Rockingham.....								
Rowan.....	10	750	3	4	24	*		1
Rutherford.....	6	*			22	800		
Sampson.....					22			
Stanly.....								
Stokes.....	10	500	3	2	22	400	4	3
Surry.....								
Swain.....								
Transylvania.....								
Tyrrell.....								
Union.....	2		0		31			
Vance.....	5	*	3	4	11	*		5
Wake.....	73 (b)	*			*			
Warren.....	4	*		3	21	*		2
Washington.....								
Watauga.....	6	500	0	0	7	*	0	0
Wayne.....	8	952			9	*		
Wilkes.....								
Wilson.....	7	*	4	3	22	*	1	4
Yadkin.....								
Yancey.....								

\* Space exceeds one thousand cubic feet. (a) Includes 6 in house of correction. (b) Includes 61 in house of correction.

*Mortuary Report for February, 1893.*

**Meteorological Summary for North Carolina, February, 1893.**

Furnished by the North Carolina Agricultural Experiment Station and State Weather Service.  
 H. B. BATTLE, PH. D., Director. C. F. von HERRMANN, Meteorologist.

STATIONS.	TEMPERATURE (Degrees Fahr.).										NO. OF DAYS					
	Monthly Mean.	Highest.	Date.	Mean Maximum.	Lowest.	Date.	Mean Minimum.	Monthly Range.	Mean Daily Range.	Mean Rel. Humidity.	Total Precipitation.	Clear.	Partly Cloudy.	Cloudy.	Rainy.	Precipitation.
Asheville.....	49.8	70	2	52.0	18	23	29.7	52	23.3	73.4	4.71	9	11	8	13	N.
Bakersville .....	49.8	72	2	53.3	14	23	28.4	58	24.9	.....	4.16	9	9	10	7	S. W.
Charlotte.....	44.6	67	2	52.6	26	6	36.7	41	15.9	71.0	7.46	11	3	14	16	N. E.
Chapel Hill.....	42.2	72	2	52.1	21	5	32.2	51	19.9	.....	5.41	.....	.....	11	W.	
Horse Cove.....	42.1	67	16	49.5	24	6	34.8	43	14.7	.....	9.18	6	9	13	12	N.W.
Littleton .....	41.4	71	16	52.2	18	20	30.7	53	21.5	.....	5.99	12	3	13	15	N. E.
Lenoir .....	41.9	65	2	47.1	22	23	37.0	43	10.1	.....	5.20	9	6	12	8	N.W.
Louisburg .....	42.1	68	16	51.2	21	20	33.1	47	18.1	.....	5.32	2	11	15	13	N.W.
Mount Airy.....	49.3	65	1	49.5	15	21	31.1	50	18.4	.....	5.06	3	11	14	8	S. W.
Mount Pleasant .....	43.7	70	2	53.0	23	23	31.7	47	18.3	.....	7.18	8	5	15	13	.....
Newbern .....	45.7	71	16	54.1	21	21	37.3	50	16.8	.....	3.25	.....	.....	11	.....	
Oak Ridge.....	42.0	66	1	51.5	18	21	32.5	48	19.0	.....	7.35	7	5	16	12	N. E.
Pittsboro .....	41.0	69	2	48.9	18	21	33.0	51	15.9	.....	6.16	7	6	15	11	N. E.
Raleigh .....	43.8	72	2	53.2	21	21	35.5	51	16.7	80.8	6.17	12	2	14	13	S. W.
Rockingham.....	51.8	79	2	64.1	28	19	39.4	51	24.7	.....	5.61	.....	.....	10	.....	
Saxon .....	40.6	66	1	50.9	13	20	31.2	53	18.8	.....	7.10	8	7	13	13	N. E.
Salisbury .....	43.0	67	2	50.4	24	5	35.7	43	14.7	.....	7.78	.....	.....	11	.....	
Southern Pines.....	43.2	72	2	53.7	22	6	32.8	50	19.9	.....	7.10	13	3	12	10	N.
Tarboro .....	45.8	76	16	57.4	23	21	34.0	55	23.4	.....	3.10	12	4	12	9	W.
Weldon .....	43.8	73	16	53.5	21	21	34.2	52	19.3	.....	3.98	11	6	11	23	W.
Wilmington .....	52.0	76	3	61.0	31	5	43.0	45	18.0	83.0	2.91	9	7	12	14	N. E.

## STATE METEOROLOGICAL SUMMARY FOR FEBRUARY, 1893.

Mean Barometer 30.19 inches; normal for February, 30.13. Highest Barometer 30.81 on the 8th, at Knoxville, Tenn. Lowest Barometer 29.45 on the 19th, at Lynchburg, Va.  
 Mean temperature 43.8 degrees; normal for February, 43.3. Highest temperature 79, on the 2d, at Rockingham. Lowest, 44, on the 23d, at Bakersville.  
 Average precipitation, 5.39 inches; normal for February, 4.25. Greatest amount, 11.37 at Bakersville. Least amount, 1.85 at Currituck Inlet.  
 Average number of clear days, 9; partly cloudy, 6; cloudy, 13; rainy, 12.  
 Prevailing wind direction, north-west; average velocity, 9.9 miles per hour. Normal direction for February, southwest. Normal velocity, 9.3 miles per hour.  
 No severe cold waves during the month.



















